The JOURNAL

of the Michigan State Medical Society

ISSUED MONTHLY UNDER THE DIRECTION OF THE COUNCIL

VOLUME 45 DECEMBER, 1946 NUMBER 12

Conjunctivitis—Acute, Hemolytic, Staphylococcus Aureus

Lt. Col. M. D. Campbell, MC
Detroit, Michigan

A CONTINUOUS PROBLEM presents itself to the eye service at the Regional Station Hospital, Orlando Army Air Base, Orlando, Florida. The predominating factor in this ever-present conjunctivitis, acute, catarrhal, is the hemolytic and non-hemolytic staphylococcus aureus. Other etiological factors are minimal compared to the frequency of staphylococcus aureus infections that involve the conjunctiva.

Bacteriology

A culture from the surface of the conjunctiva, the caruncle and adjoining inner canthal palpebral skin, was obtained in one hundred and seven cases.

Three groups may be established. In group A the cultures were negative. These were taken from the mild cases, and it was assumed the absence of growth in the culture was due to a paucity of organisms.

Non-hemolytic and slightly hemolytic staphylococcus albus was the usual report in group B. The clinical progress of the conjunctivitis conformed to the early signs and symptoms of a progressing staphylococcus aureus infection. The staphylococcus albus cultures were considered slightly pathogenic or incidental or were difficult to differentiate from the staphylococcus aureus.

Non-hemolytic and hemolytic staphylococcus aureus comprised group C. Lt. Colonel P. Thygeson at Drew Field suggested the use of the coagulose test. This was found positive in the hemolytic strain, when marked infections of the conjunctiva and cornea were the rule. Non-hemolytic staphylococcus aureus and albus coagulose reports were negative, as well as the slightly hemolytic staphylococcus albus cultures.

Etiology

A series of situations take place to set the stage for the clinical picture. The performer is the staphylococcus aureus and the stage is the conjunctiva which, in these cases, is susceptible to the infection or reacts to the bacterial invader in an allergic manner. The following conditions are responsible for the infections:

1. Weather. The sebaceous and sweat glands in the palpebral skin are active in warm weather and noticeably so when an increase in humidity is associated.

2. Bacteria. The source of staphylococci is in the skin.[2] The skin of the lower eyelid is the essential contaminating culprit. In an examination of the pathogenicity of various types occurring in palpebral and conjunctiva infections, Burkey (1933) differentiates three varieties. The first, a hemolytic and a toxin producer; the second, non-hemolytic and non-toxic, but pathogenic; the third, non-hemolytic, non-toxic, and non-pathogenic. All types may assume hemolytic properties (Julianelle—1922; Gowen—1934) and mutations from the "rough" type to the "smooth" can be constantly observed in all stages (Gowen—1934).

Dr. Campbell, formerly with the AAF Regional Station Hospital, Orlando Army Air Base, Orlando, Florida, is now practicing in the Washington Square Building, Royal Oak, Michigan.

Moreover, the opposite attenuation phenomenon of "smooth" to "rough" becomes evident both in the conjunctiva and the skin around it in recovery from infections, and in those persons in whom resistance to staphylococcal infection of the skin is high. Some strains have the power of producing an extremely powerful and sometimes lethal exotoxin (Burnet & Kellaway—1930) to which patients may become allergically hypersensitive.

3. Palpebral topography. The very thin, palpebral skin is indented with a multitude of wrinkles and lines. These tributaries are confluent at the inner canthus. Little streams of bacteria-laden secretion empty into the space around the caruncle and by capillary action spread with the lacrimal secretion along the intermarginal space of the lid margins. The lower dependent lid is the usual source from which the infection spreads to the shafts of the lashes in the lid and by contact to the intermarginal space and lashes on the upper lid. The constant winking or blinking of the lids not only transfers the infection to the lacrimal secretion, but smears it over the bulbar conjunctiva and cornea.

4. Contamination. The natural response to wet, greasy, and itchy lids takes the form of rubbing the lids, lashes, and especially the inner canthus with the fingers. This maneuver sows the palpebral area with more and diverse organisms.

5. Nervous behavior. As the threshold for pain varies with people, so does the controlled or uncontrolled response to irritation. The lack of instinctive or learned knowledge that guides a potential case of conjunctivitis to a prophylactic procedure, as avoiding rubbing of the eye, is a factor. The minimal sensation experienced by certain people in the presence of marked signs of inflammation further allows the spread of a virulent infection.

6. Immunity. People are endowed with, or without, natural or artificial immunity to organisms. Bacterial virulence ranges from non-toxic and non-pathogenic to toxic and pathogenic. A preponderance of one property over the other leads to the embarrassment of the weaker.

Symptoms

The symptoms, in order of intensity, are itchiness, smarting, burning, sandiness, stickiness, occasional blurring of vision, crustiness, lid-sticking, photophobia, and eye ache. The symptoms or interpretation of sensations by the nerve endings in the conjunctiva and cornea are not comparable to the signs. Some nervous systems make a great fuss over minor signs and symptoms, and others ignore major ones.

Progressing Signs

1. Vascular changes are first confined to the conjunctiva of the lower lid, appearing as a diffuse, fine, papillary hyperemia. This papillated appearance is observed in the upper fornix and over the conjunctival surface of the tarsus of the upper lid in the later severe stages of an active conjunctivitis.

2. Aqueous mercurochrome (4 per cent) and fluorescence (5 per cent) are used to stain the bulbar conjunctiva and cornea. Comparative slit lamp examinations reveal an advancing process where one observes in sequence:

(a) Discreet pin-point red-stained spots. These are confined entirely to the exposed bulbar conjunctiva. The spots are congregated around the caruncle. They are especially scattered near the margin of the cornea.

(b) A red smear of spots of color radiating down below the lower lid margin from the limbus between 5 and 7 o'clock into the lower fornix.

(c) Subconjunctival edema beneath these red spots and the red color may be observed to have penetrated into the subconjunctival tissue. In addition, grayish-white distinct infiltrations may also be observed in the edema under the red spots when the condition is more severe, especially at the limbus margins around 9 and 3 o'clock.

(d) Corneal changes begin as fine, pin-point green stippling that may become grouped into a red mottling. The early changes occur in the lower aspect of the cornea and spread discreetly upward over the pupil becoming increasingly dense in the lower and central cornea as the process increases in severity. At 9 and 3 o'clock on the limbus a severe process may take place. The conjunctiva mounds up, revealing a deeply-stained adjacent corneal ulceration. Infiltration is observed under the mound and the edematous conjunctiva protrudes between the lid margins.

(e) Vascular, papillary, dull red, thickened, mucous membrane changes are marked in the upper and lower fornices. The tarsal and bulbar conjunctivae are red and thick in addition to the corneal changes described above.

(f) Small pellicles of pus are observed floating on the abundant lacrimal secretion of the everted

lower fornix or adherent to the conjunctiva of the upper fornix.

(g) Edema of the upper and lower lids.

(h) Blepharitis marginalis is a complication that occasionally follows an acute infection. It incites acute exacerbations that often continue for years.

Treatment

Medicinals and procedures:

1. Cocaine hydrochloride (0.5 per cent) solution.
2. Seventy per cent ethyl alcohol solution.
3. Mercurochrome, 4 per cent (aqueous).
4. Equal parts of a solution of 5 per cent anhydrous aluminum chloride and sodium salicylate (gr. 10 to an ounce of 70 per cent ethyl alcohol).
5. Mercurochrome, 10 per cent. aqueous.
6. Boric acid solution, 5 per cent.
7. Compounded prescription:

Adrenalin chloride (1/1000)	M.	10
Boric acid	gr.	1
Aqua Camphor	dr.	1
Aqua distilled, qsad	oz.	1
Add 0:06 per cent Lugol's sol.	oz.	1

Dispense in one-half ounce small colored bottles.
Sig: 2 drops in each eye, twice daily.

8. Silver nitrate (1 and 2 per cent) solutions.
9. Tri-chlor-acetic acid (20 per cent solution) and silver nitrate (50 per cent) solution.
10. Allergy investigation.
11. Sulfadiazine (gr. 5) and soda bicarbonate (gr. 10) capsules taken five times daily as ambulatory doses.
12. Hospitalization and administration of sulfadiazine, gm. 7 to 10, daily with proper amounts of water and soda bicarbonate to obtain a blood level of 10 mg.
13. Penicillin.

Local sulfonamide and penicillin applications were enthusiastically applied without the proportionate success and were discontinued. The medicines are listed in the above order to indicate the ones required in treatment as the severity of the infection progressed.

1. Cocaine solution is a vaso-constrictor and a local anesthetic. The anesthesia is important to eliminate the discomfort attending the application of mercurochrome, silver nitrate, et cetera. The vaso-constrictor action, in blanching the lid conjunctiva, indicates a return to normal vascular control where previously cocaine had no effect on the dilated capillaries. The patient's complaints cease at this stage, and he is discharged from the outpatient clinic.

2. A cotton-tipped applicator lightly saturated with 70 per cent ethyl alcohol is used to cleanse the intermarginal surface of the lids, the lashes, the creases in the skin of the upper and lower lids, and the adjacent brow, nasal bridge and cheek.

3. A drop of 4 per cent aqueous mercurochrome solution is instilled into the lower fornix, or may be applied to the everted conjunctival surfaces of the upper and lower fornices and tarsi.

4. A careful application of the aluminum chloride and sodium salicylate solution is made on the skin of the upper and lower lids as well as on the skin of the brow, face and bridge of the nose. The patient experiences a feeling of stiffness and dryness about the eyes that is the result of diminished glandular activity and stiffening of the superficial epithelium of the skin. This application must not approach the lashes or canthi but be applied so that it will dry quickly and not run.

5. A moderate application of 10 per cent aqueous mercurochrome solution is artistically applied to the bases of the lashes, the intermarginal space, the skin of the upper and lower lids, and around the inner canthus.

Mercurochrome might almost be considered a specific for staphylococcus infection. Two and one-half per cent aqueous mercurochrome was diluted in a ratio of 1 to 5, 120,000 parts of isotonic saline sterile solution. To 2.5 c. c. of the latter solution, 1/10 c. c. of a twenty-four hour culture of standard strain 209 hemolytic staphylococcus aureus was incubated without growth.

The color reminds the patient to avoid putting his fingers in or near his eyes. Mercurochrome stains and penetrates the epithelium to devitalize the organisms. A desire for overtreatment by certain patients is inhibited by the continuous "red-eyed" appearance.

6. A 5 per cent boric acid solution is used to bathe the eyes night and morning.

7. With the adrenalin, boric acid, camphor, and Lugol (ABCL), 2 drops are dropped into the eye in the barracks twice daily after eye bathing and more frequently if possible. Adrenalin is used to combat hypersensitiveness, by keeping the size of the conjunctival blood vessels to their normal caliber; boric acid, to make the solution of a pH 4, is indicated to inhibit staphlyococcal bacterial growth; camphor is an astringent, and iodine (Lugol's) is antiseptic.[1]

8. Silver nitrate (1 or 2 per cent) solution is applied to the upper and lower fornix and the conjunctiva covering the tarsi. Normal saline lavage follows the application.

9. Tri-chlor-acetic acid (20 per cent) solution or 50 per cent silver nitrate solution is carefully damped into the mouths of the infected glands and the ulcerated craters surrounding the lashes. The lashes in the infected lash beds are withdrawn before the above application. Penetration is abet-

ted and staphylococci bacterial action destroyed.

10. Allergic investigation is imperative. Water for liquids and beverage is advised. Desserts are to be avoided. Most of the aggravating allergins are found in non-essential drinks and desserts. Meat, dark breads, butter, soups, salads, raw and cooked vegetables form the basis of the daily meals. Potatoes and bread may be offenders and require further elimination from the diet. Sensitization tests should follow and further arrangements made for desensitization by the allergy service.

11. Sulfadiazine, administered internally, has been found to be very effective in severe infections. Local sulfa and penicillin washings have been disappointing. Capsules containing sulfadiazine gr. 5 and sodium bicarbonate gr. 10 are prescribed (after meals and two at bedtime) for outpatient cases. Suitable water intake is advised.

12. Patients requiring hospitalization received enough of the sulfadiazine, sodium bicarbonate and water regime to assure a sulfa blood level of 10-12 mgms. per cent. Penicillin (as in 13) was used to accentuate the expected beneficial effects of sulfa in certain hospital cases.

13. Hospitalization and intramuscular injection of 25,000 units of penicillin, every three hours daily, has been very efficient in the sub-acute and acute stages. It has been disappointing in the confirmed chronic stage.

Results

From the files for the months of December, January, February, 107 cases were studied. Fourteen patients received ten or more treatments with an average of fourteen treatments per patient. The remaining ninety-three received less than ten treatments, with an average of three visits per patient. Two enlisted men and one dependent required hospital and clinical care for infections that reached the phlyctenular keratitis stage. A woman dependent was admitted with a diagnosis of panolphthalmitis. She received sulfadiazine by mouth and intramuscular penicillin into the buttocks and deltoid muscles that were kept at low temperatures by ice bags. An evisceration was performed. A culture of hemolytic staphylococcus aureus was recovered from the pus taken from the intraocular contents.

Conclusions

1. A particular cause of eye infection in this locality is the hemolytic staphylococcus aureus.

(Continued on Page 1680)

A Comparative Study of Mercuhydrin and Mercupurin, Oral and Parenteral

By M. B. Finkelstein, M.D., and
Charles J. Smyth, M.D.
Eloise, Michigan

M. B. Finkelstein

Charles J. Smyth

SINCE THE INTRODUCTION of the mercurial diuretic merbaphen (Novasurol) in 1920 by Saxl and Heilig,[17] there has been a continuous search for a more effective and less toxic agent of this type. Brunn[3] in 1924 introduced salyrgan (Mersalyl), and Issekutz and Vegh[20] in 1928 reported that diuresis was produced by mercupurin. Salyrgan and mercupurin are complex mercurial salts containing 5 per cent theophylline. It has been demonstrated by De Graff et al.,[4,5,6] that the addition of theophylline to the mercurial salts increases their rates of absorption, enhances their diuretic effects, decreases their toxicity, and in particular reduces their local irritating properties.

In 1938, Geiger and Vargha[10] reported the results of a pharmacological and clinical investigation of the new mercurial diuretic, the sodium salt of oxy-mercuri-allyl-succinyl-carbamide. It possessed low toxicity and had a marked diuretic effect. For this compound they proposed the following structural formula:

$$CH_2\text{-}CH\text{-}CH_2\text{-}NH\text{-}CO\text{-}NH\text{-}CO\text{-}CH_2CH_2\ COONa$$
$$OH\ HgOH$$

They further characterized this preparation as a white powder, which is insoluble in water, with

From the Departments of Medicine of Wayne University College of Medicine, Detroit, Michigan, and the Wayne County General Hospital and Infirmary, Eloise, Michigan.

This study was supported in part by a grant from the Lakeside Laboratories, Inc., Milwaukee, Wisconsin.

a melting point of 185° to 186° and containing 46.4 per cent mercury. They studied the toxic and diuretic effects of this preparation in mice, dogs, rabbits and in children with postdysenteric edema, and found that it had a strong diuretic action. They also administered this drug both intravenously and intramuscularly to adults with cardiac edema and edema due to other causes, and achieved intensive diuresis. They concluded that "this preparation is particularly effective and in therapeutic doses is absolutely harmless—it causes neither pain nor local reactions when administered by intramuscular injection."

In 1942, Nuhfer, Mellish and Buchter[16] reported the toxicity, absorption, and diuretic properties of a compound resembling that prepared by Geiger and Vargha. This chemical compound was N-(3 methoxy- 2 oxymercuriproplyl) N-succinylurea. According to these investigations this new compound has the following structural formula:

$$\begin{array}{l} CH_2\text{-}CH\text{-}CH_2\text{-}NH\text{-}CO\text{-}NH\text{-}CO\text{-}CH_2\text{-}CH_2\ COOH \\ OCH_3\ HgOH \end{array}$$

The sodium salt of this compound combined with theophylline is supplied under the trade name *Mercuhydrin.** Each cubic centimeter of the aqueous solution of this preparation contains 39 mg. of mercury and 48 mg. of theophylline. The amount of mercury in this new drug is approximately the same as that contained in the two mercurial diuretics in common use (salyrgan: 39.6 mg. per c.c., and mercupurin: 39 mg. per c.c.).[12]

The purpose of the present study was to evaluate the diuretic and toxic effects of this new compound, mercuhydrin, and to compare these results with those obtained with mercupurin.

Method of Study

Selection of Patients.—All patients (206) included in this study were hospitalized throughout the period of observation. There were 129 patients who received mercuhydrin and 77 who received mercupurin. The majority (117) of those who were treated with mercuhydrin had edema due to cardiac disease, two had the nephrotic syndrome, and ten had ascites due to portal cirrhosis. The edema in all of the patients treated with mercupurin was due to cardiac disease.

Routine Care.—On admission to the hospital all patients were placed at strict bed rest. Every one received a low-salt diet (2.8 gm. sodium chloride daily). Those patients with edema due to cardiac failure, who had not received digitalis, were completely digitalized and then were maintained on digitalis throughout the period of observation. If, at the time of admission, they had been receiving a maintenance dose of digitalis, this drug was continued. On admission to the hospital, a complete blood count, urinalysis, electrocardiogram, and a blood nonprotein nitrogen level were obtained. These studies were repeated at intervals during the period of observation. In a few cases, urea clearance tests were performed before and after the mercuhydrin was given. In many instances, single samples of morning urine were obtained for examination of the urinary sediment, twenty-four and forty-eight hours following the administration of the diuretic.

All patients were weighed every morning at approximately the same time; a standard platform scale was used. When the patient weights became stable under the bed rest, low-salt diet and digitalis, mercurial diuresis was instituted. In many cases, all evidence of clinically detectable edema had disappeared before the mercurial diuretic was started.

Mercuhydrin was administered to one group in 1 c.c. or 2 c.c. doses, either intramuscularly or intravenously. Mercupurin was administered intravenously to another group in doses of 1 c.c. or 2 c.c. The interval between injections varied from four to seven days. Five tablets of mercupurin† were given orally to twenty-five patients as a single morning dose.

If no diuresis occurred following the mercurial drugs, as judged by the weight loss, or if the amount of diuresis was considered inadequate, the patient was given enteric-coated ammonium chloride tablets in doses of 8 gm. daily for three days, followed by mercuhydrin or mercupurin on the fourth morning. One of the mercurial preparations was given to a few patients with severe decompensation before their weights became stable.

In each of the patients with ascites due to liver disease, the diagnosis was established by peritoneoscopy and liver biopsy. All of the patients with ascites due to portal cirrhosis received a high-protein, high-carbohydrate, low-fat and low-salt diet;

*Mercuhydrin is the trade name for N-(3 methoxy-2 oxymercuripropyl)N succinylurea manufactured by the Lakeside Laboratories, Inc., Milwaukee, Wisc.

†The tablets of mercupurin were supplied by the courtesy of Campbell Products, Inc. Each tablet contains 100 mg. of mercuperin powder, equivalent to 30 mg. of mercury and 27 mg. of anhydrous theophylline.

otherwise the plan of management was similar to that used in the patients with cardiac edema.

Results

During the course of this investigation, a total of 535 injections of mercuhydrin were given; 234 injections were administered to 112 patients by the intramuscular route and 301 injections were given to fifty-one patients by the intravenous route. In thirty-four patients this drug was given both intramuscularly and intravenously. The diuretic effect as judged by the amount of weight loss in the 24-hour period following each injection was determined in 332 instances. Fifty of these injections were preceded by a three-day preparatory period of ammonium chloride therapy. The remaining 203 injections were given to patients considered too ill to be weighed daily; conclusions drawn from these patients pertain primarily to local and general toxic effects.

Mercupurin was given by the intravenous route to fifty-two patients; a total of 232 injections were given. Ammonium chloride, in doses of 8 gm. per day for three consecutive days preceding a single injection of mercupurin, was used on thirty-six occasions. Mercupurin, administered orally in a single dose of five tablets, was studied on fifty-six occasions in twenty-five patients.

TABLE I. WEIGHT LOSSES OBSERVED TWENTY-FOUR HOURS AFTER THE INTRAMUSCULAR AND INTRAVENOUS ADMINISTRATION OF 1 C. C. AND 2 C. C. DOSES OF MERCUHYDRIN

DISEASE	DOSE AND METHOD OF ADMINISTRATION	NUMBER OF INJECTIONS	INJECTIONS SHOWING NO WT. LOSSES	AVERAGE WT. LOSSES IN POUNDS
HEART DISEASE	1 CC. I.M.	41	5	2.65
	1 CC. I.V.	70	10	2.26
	2 CC. I.M.	52	2	3.56
	2 CC. I.V.	73	4	3.23

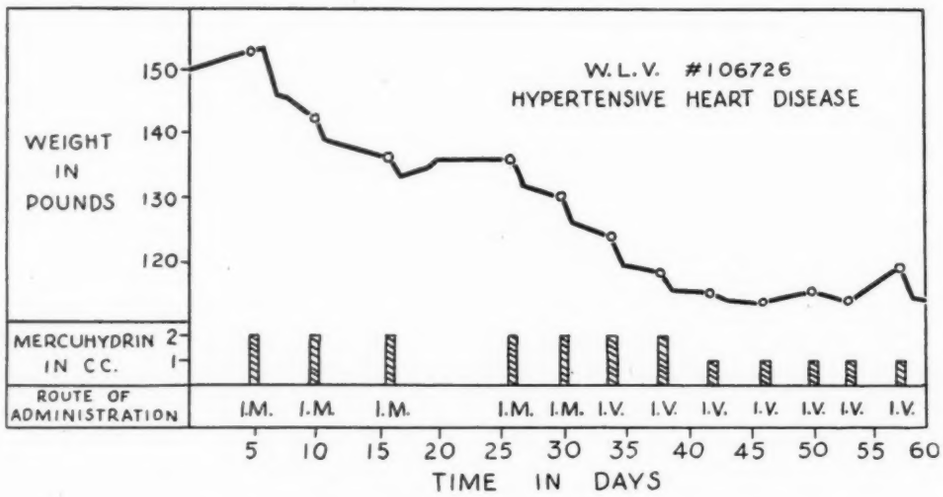


Fig. 1. Diuretic effect in pounds of weight loss following mercuhydrin.

In Table I are summarized the results obtained with mercuhydrin given intramuscularly and intravenously in 1 c.c. and 2 c.c. doses to patients with edema due to heart disease. The average weight loss obtained with the 1 c.c. dose given intramuscularly was 2.65 pounds (1.2 Kg.); with the same dose intravenously the average weight loss was 2.25 pounds (1. Kg.). The average weight loss observed with the 2 c.c. dose given intramuscularly was 3.56 pounds (1.6 Kg.); with the same dose given intravenously the average weight loss was 3.23 pounds (1.4 Kg.). Occasionally, diuresis failed to develop when mercuhydrin was given alone, both with the 1 c.c. and

the 2 c.c. doses; however, these failures were less frequent with the larger dose. In general, more consistently good results were obtained with the 2 c.c. dose. The patient W.L.V. (Fig. 1) with edema due to hypertensive heart disease illustrates satisfactory diuresis as reflected by the weight loss travenously the average weight loss was 8.27 pounds (3.8 Kg.). These data indicate that the diuretic effect was consistently greater in those instances where ammonium chloride preceded the mercurial diuretic than with the mercurial diuretic alone, and with the preliminary medication

TABLE II. WEIGHT LOSSES OBSERVED TWENTY-FOUR HOURS AFTER THE INTRAMUSCULAR AND INTRAVENOUS ADMINISTRATION OF 1 C. C. AND 2 C. C. DOSES OF MERCUHYDRIN PRECEDED BY AN AMMONIUM CHLORIDE PREPARATORY PERIOD.

DISEASE	DOSE AND METHOD OF ADMINISTRATION	NUMBER OF INJECTIONS	INJECTIONS SHOWING NO WT. LOSSES	AVERAGE WT. LOSSES IN POUNDS
HEART DISEASE	1 CC. I.M.	12	0	4.66
	1 CC. I. V.	5	0	5.80
	2 CC. I M.	4	0	11.25
	2 CC. I. V.	11	0	8.27

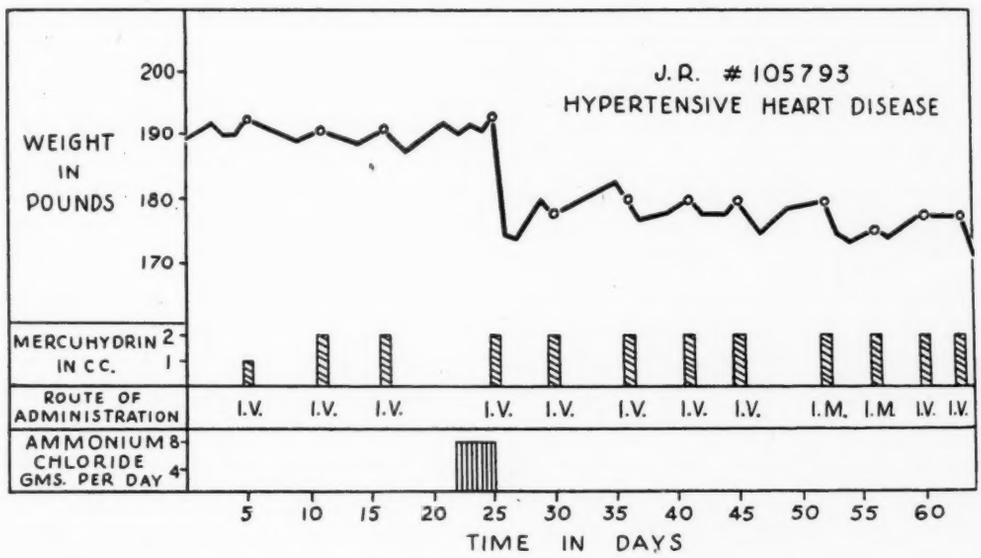


Fig. 2. Diuretic effect in pounds of weight loss following ammonium chloride and mercuhydrin.

of 34 pounds (15.5 Kg.) following repeated injections of mercuhydrin during a period of fifty-five days. In this patient, there was a gradual increase in weight during the first five days of hospitalization, before the mercurial diuretic was given.

The results obtained with mercuhydrin preceded by a period of ammonium chloride therapy are summarized in Table II. The weight loss obtained with the 1 c.c. dose given intramuscularly was 4.66 pounds (2.1 Kg.); with the same dose given intravenously, the average weight loss was 5.8 pounds (2.6 Kg.). The average weight loss with the 2 c.c. dose given intramuscularly was 11.25 pounds (5.1 Kg.); with the same dose given intravenously the average weight loss was 8.27 pounds (3.8 Kg.). These data indicate that the diuretic effect was consistently greater in those instances where ammonium chloride preceded the mercurial diuretic than with the mercurial diuretic alone, and with the preliminary medication there were no instances of failure of diuresis. In general, the diuretic effect produced in patients with cardiac edema by ammonium chloride plus mercuhydrin was more than twice that which followed mercuhydrin alone. The patient J.R. (Fig. 2) with hypertensive heart disease illustrates this point. He was given a 1 c.c. dose and later 2 c.c. doses of mercuhydrin intravenously without weight loss. Ammonium chloride was then given for three successive days, followed by mercuhydrin on the morning of the fourth day, and a weight loss of 18 pounds (8.2 Kg.) occurred during the next twenty-four hours. Thereafter diuresis was

obtained in this case with 2 c.c. doses of mercuhydrin alone.

In Table III are summarized the results obtained following the intravenous and oral administration of mercupurin. This drug was given 91 times in doses of 1 c.c. intravenously and it produced an average weight loss of 2.93 pounds (1.53 Kg.). It was administered 141 times in doses of 2 c.c. and produced an average weight loss of 3.24 pounds (1.4 Kg.). When ammonium chloride was given as preliminary therapy, followed by mercupurin, the weight loss was at least twice that which occurred when the latter drug was used alone. Ammonium chloride, in doses of 8 gm. per day for three consecutive days preceding a single intravenous dose of 1 c.c. of mercupurin, was used on seventeen occasions and the average amount of weight loss was 5.7 pounds (2.6 Kg.). This same preliminary medication was used in nineteen instances preceding the single 2 c.c. doses of mercupurin, and the average weight loss which followed was 6.3 pounds (2.9 Kg.).

TABLE III. WEIGHT LOSS OBSERVED TWENTY-FOUR HOURS AFTER THE INTRAVENOUS AND ORAL ADMINISTRATION OF MERCUPURIN.

AMMONIUM CHLORIDE GMS. 8 FOR 3 DAYS	DOSE AND METHOD OF ADMINISTRATION	NUMBER OF INJECTIONS OR DOSES	INJECTIONS SHOWING NO WEIGHT LOSS	AVERAGE WEIGHT LOSS IN POUNDS
NONE	1 CC. I.V.	91	15	2.93
	2 CC. I.V.	141	10	3.24
	5 TABS. ORAL	35	26	2.61
GIVEN	1 CC. I.V.	17	2	5.70
	2 CC. I.V.	19	1	6.30
	5 TABS. ORAL	21	9	3.46

The diuretic effects produced by mercupurin administered orally in a single dose of five tablets was less than either mercupurin or mercuhydrin given parenterally. There were thirty-five trials of mercupurin given by mouth, without preliminary ammonium chloride therapy, and the average amount of weight loss was 2.61 pounds (1.2 Kg.); in twenty-six of these thirty-five instances there was no weight loss following oral mercupurin. Mercupurin administered by the oral route, after a period of ammonium chloride therapy, on twenty-one occasions resulted in an average weight loss of 3.46 pounds (1.6 Kg.); in nine of these twenty-one trials there was no diuresis following oral mercupurin.

Toxicity

Mercuhydrin.—Pain at the site of the injection occurred in seven instances following 234 intramuscular injections. No areas of induration and no abscesses were observed with any of these injections. On several occasions during intravenous injections, extravasation occurred which caused moderate pain along the vein.

Urinary sediments were studied following 181 injections; an increase in the number of hyaline casts was found on seventy-four occasions. Renal function, as indicated by urea clearance tests, was determined before and after a series of injections of this new drug in ten patients. The blood non-protein nitrogen was determined before and after the drug in fifty-four patients. These investigations revealed no evidence to indicate renal damage attributable to mercuhydrin. Although the number of patients thus studied is small, we find no evidence to indicate any significant renal damage. One patient, in whom a decrease in the urea clearance occurred, was known to have chronic nephritis, and the change in renal function was probably due to progression of the nephritis and not to any deleterious action of the drug. Another patient, a twenty-eight-year-old negro, with syphilitic aortic insufficiency in severe cardiac decompensation, was given mercuhydrin in the presence of hematuria. On the regimen of strict bed rest,

a salt-poor diet, and a maintenance dose of digitalis for five days, he gained 7 pounds in weight. Innumerable red blood cells were present in the urine on several occasions, but in view of the severity of the congestive failure it was decided to give a mercurial diuretic. Diuresis was effected immediately; the patient lost 18 pounds and hematuria disappeared.

Electrocardiograms were taken before and after mercuhydrin in forty cases. In none of them was there any lasting change in the electrocardiograms after several doses of this new drug. We have not attempted to investigate by electrocardiographic studies possible immediate or transitory effects upon the myocardium or the conduction system.

No significant hematological changes were detected in nineteen of twenty cases treated with mercuhydrin. In one patient there was a decrease of 5 gm. in the hemoglobin content. This man had received sodium thiocyanate at the same time mercuhydrin was given; therefore, we are unable to determine whether this drop in hemoglobin was due to either of the drugs or to some other factor.

One patient experienced precordial pain and anxiety immediately following an intravenous injection of 2 c.c. of mercuhydrin; this did not recur with subsequent injections of equal amounts of the drug by the same route. No deaths attributable to this mercurial diuretic occurred in this series of patients.

Mercupurin.—In the series of seventy-seven patients who received mercupurin none showed any evidence of local or general systemic reactions. During the course of this investigation, however, we observed one patient, not included in this study, who developed urticaria when given mercupurin but who tolerated mercuhydrin with no ill effects. Within ten minutes after a 1 c.c. dose of mercupurin given intravenously, she developed pruritic areas of urticaria. Subsequently, 1 c.c. and 2 c.c. doses of mercuhydrin administered intravenously caused no untoward reactions. It has been previously shown that a patient hypersensitive to one mercurial diuretic may take another with impunity.[8]

Discussion

The method of daily weights is a simple and fairly accurate means of following the diuretic effects of any preparation (see Goodman, Consaro and Stasey,[11] and Modell[14]). By waiting until the patient's weight becomes stable ("state of balance" of Goodman et al.[11]) before administering the diuretic, the error of attributing to the drug the diuresis due to bed rest, digitalis, and salt restriction is avoided.

The administration of ammonium chloride for forty-eight to seventy-two hours before the injection of mercurial preparations enhance their action.[7,13] In this study, the use of ammonium chloride was limited to those patients who failed to respond, or in whom diuresis was considered inadequate after the administration of the mercurial diuretic alone. The results summarized in Tables I and II, indicate that all patients with cardiac decompensation who had not experienced diuresis with mercuhydrin alone, experienced a significant diuresis by this method.

It appears that mercuhydrin is as effective when given intramuscularly as when given intravenously. In some instances, as shown by a comparison of Tables I and II, this drug produced a slightly greater weight loss when given intramuscularly.

Modell, Gold and Clarke[15] recently reported a well-controlled comparative study of the local irritant effects of intramuscular injections of mercuhydrin and mercupurin. The majority of their patients claimed that mercuhydrin caused the least discomfort. Although our studies are not well controlled in this respect, we concur in the opinion that mercuhydrin is less irritating locally than mercupurin when administered intramuscularly.

A number of immediate deaths have been reported following the intravenous injection of diuretics.[1,2,9,18,19,21] None occurred in this study. This danger should not be minimized, but the number of serious reactions reported is exceedingly small as compared to the large number of injections of mercurial diuretics given. In this general hospital, an average of 1,500 ampules of mercupurin are given per year, and during the past six years not a single instance of sudden death attributable to mercurial diuretics has occurred. As was pointed out by Wexler and Ellis,[21] no fatalities have been reported after the intramuscular injection of mercurial diuretics. In view of the fact that mercuhydrin is associated with slight local irritation at the site of intramuscular injection and is equally effective when given by this route, it offers a definite advantage over the mercurial diuretics now in use.

Throughout this study, attention has been focused on any possible renal damage which might result from the use of mercuhydrin. There was an increase in hyaline casts in the urinary sediment following 40 per cent of 181 injections in which the sediment was studied. A review of the American literature has revealed only an occasional report in which mention is made of the occurrence of casts in the urine of patients treated with mercurial diuretics. None of these authors attributed any significance to this finding. In this study albuminuria did not occur; the nonprotein nitrogen values of the blood remained normal or, if elevated, returned to normal with the loss of edema, and there was no impairment of urea clearance attributable to mercuhydrin. These facts are interpreted as indicating that this new mercurial produces no measurable toxic effects on the kidneys.

The 1 c.c. and 2 c.c. doses of mercuhydrin were chosen in this study because the mercury content was comparable to the usually recommended doses of organic mercurial diuretics in common use. The results, summarized in Tables I and II, indicate that a more adequate total diuresis was obtained with the 2 c.c. doses than with the 1 c.c. doses. When mercuhydrin was preceded by ammonium chloride, there were no failures of diuresis with either dose of mercuhydrin. However, the loss of weight in twenty-four hours following the larger dose was frequently so great as to be alarming, and often these patients appeared exhausted for twenty-four hours or longer. This was due principally to the rapid loss of the large amount of fluid and the exertion incident to this massive fluid excretion. In view of these considerations it is recommended that mercuhydrin be given in 1 c.c. doses when it is preceded by ammonium chloride, or 2 c.c. doses when given without this preliminary preparation.

Summary

The diuretic and toxic properties of a new organic mercurial N-(3-methoxy-2-oxymercuriopropyl)N-succinylurea, *mercuhydrin,* were studied in 129 patients with edema. These results were compared with those obtained when mercupurin was administered parenterally to fifty-two patients and orally to twenty-five patients. The amount of weight lost in twenty-four hours after the administration of the diuretic was taken as the measure of the diuretic effect.

Mercupurin, in 1 c.c. doses intravenously, produced an average weight loss of 2.93 pounds; in 2 c.c. doses, it produced an average weight loss of 3.24 pounds. Mercuhydrin, intravenously in 1 c.c. doses, produced an average weight loss of 2.26 pounds; in 2 c.c. doses, it produced an average weight loss of 3.23 pounds. Mercuhydrin was equally as effective when given intramuscularly as when given intravenously. When ammonium chloride was given as preliminary therapy, the weight loss following both mercuhydrin and mercupurin was at least twice that which occurred when the latter drugs were used alone.

Mercupurin administered orally (single dose of 5 tablets) was less effective than either mercupurin or mercuhydrin given parenterally. Oral mercupurin preceded by ammonium chloride produced a diuresis equivalent to mercupurin or mercuhydrin given parenterally without ammonium chloride. No significant toxic effects were observed in any of the cases studied.

The authors are grateful to Dr. Gordon B. Myers and and Dr. Carl A. Moyer for their helpful suggestions in this study.

References

1. Barker, M. M.; Lindberg, H. A., and Thomas, M. E.: Sudden death and mercurial diuretics. J.A.M.A., 119:1001, 1942.
2. Brown, G.; Friedfeld, R.; Kissin, M., and Sussman, R. M.: Deaths immediately following the intravenous administration of mercupurin. J.A.M.A., 119:1004, 1942.
3. Brunn, F.: Salyrgan, ein neues injezierbares diuretikum. Wien. klin. Wchnschr., 37:901, (Sept. 11) 1924.
4. De Graff, A. C.: Batterman, R. C., and Lehman, R. A.: The influence of theophyllin upon the absorption of mercupurin from the site of intramuscular injection. J. Pharmacol. and Exper. Therapy., 62:26, (Jan.) 1938.
5. De Graff, A. C.; Batterman, R. C.; Lehman, R. A., and Uasuna, E.: Excretion of mercury following administration of mercurial diuretics with and without theophylline. Pros. Soc. Exp. Biol. & Med., 39:250, (Nov.) 1938.
6. De Graff, A. C.: Nadler, J. E., and Batterman, R. C.: A study of the diuretic effects of mercupurin in man. Am. J. Med. Sc., 191:526, 1936.
7. Etheridge, C. B.: Myers, D. B., and Fulton, M. N.: The modifying effect of various inorganic salts on the diuretic motion of salyrgan. Arch. Int. Med., 57:714-728, 1936.
8. Fox, T.; Gold, H., and Leon, J. J.: Hypersensitiveness to a mercurial diuretic with observations on its mechanism. J.A.M.A., 119:1497, (Aug. 29) 1942.
9. Friedfeld, L.; Kissin, M.; Modell, W., and Sussman, R.: Communication on mercupurin. J.A.M.A., 117:1806, 1941.
10. Geiger, E., and Vargha, L.: Investigations on new mercury dieuretics (Dilburgen). Mogyar Orvosi Arch., 39:524, 1938.
11. Goodman, J. I.: Corsara, J. F., and Stacy, R.: Mercurial and xanthine diuretics in chronic congestive heart failure. Arch. Int. Med., 70:975, (Dec.) 1942.
12. Goodman, L., and Gilman, A.: The Pharmacological Basis of Therapeutics. P. 641. New York: Macmillan Co., 1941.
13. Keith, N. M., and Whelan, M.: A study of the action of ammonium chloride and organic mercury compounds. J. Clin. Investigation, 3:149-202, 1926.
14. Modell, W.: The optimal dose of mercurial diuretics. Ann. Int. Med., 20:265, (Feb.) 1944.
15. Modell, W.; Gold, H., and Clarke, D. A.: Quantitative observation on mercuhydrin and mercupurin. J. Pharmacol. and Exper. Therap., 84:284-290, (July) 1945.
16. Nuhfer, P. A.; Mellish, C. H., and Buchter, J. A.: The toxicity, absorption and diuretic effects of a mercurated allylsuccinylurea with theophylline. Federation Proc., 1:162, 1942.
17. Saxl, P., and Heilig, R.: Ueber die diuretische Wirkung von Novasurol und andern Quecksilberinjectionen. Wien. klin Wchnschr., 33:943, (Oct. 21) 1920.
18. Tyson, Mary C.: Danger of intravenous mercurial injections in nephrosis. J.A.M.A., 117:998, 1941.
19. Volini, I. F.: Levitt, R. O., and Martin, R.: Studies on mercurial diuresis. V. Sudden death following intravenous injection. J.A.M.A., 128:12-17, (May 5) 1945.
20. von Issekutz, B., and von Vegh, F.: Ueber die diuretische Wirkung organischer Quecksilberwerbindungen. Arch. f. exper. Path. u. Pharmakol., 138:245, (Dec.) 1928.
21. Wexler, J., and Ellis, L. B.: Toxic reaction to the intravenous injection of the mercurial diuretics. Am. Heart J., 27:86, 1944.

The Biomechanical Treatment of 100 Fractured Legs

By A. Jackson Day, M.D.
Detroit, Michigan

ALTHOUGH THE GENERAL principles of treatment of fractures of the leg are well known, it is seldom possible under civilian circumstances to treat a large number of fractures over a short period of time. The author wishes to review some of the fundamental surgical and physiological principles of fracture recognition and treatment in a study of 100 fractured legs which he treated from September, 1943, to September, 1944. This group does not include the few fractures of the shaft of the fibula without fracture of the tibia, nor the many fractures of the tibia and fibula involving the ankle joint or the knee joint. The 100 fractured legs occurred in trainees. Skiing was the most common cause of injury; others resulted from accidents in military vehicles, civilian automobiles, aeroplane crashes, falls from horses, falls on icy roads and rocky terrain. None of the injuries were contaminated by soil favoring anaerobic wound infection. All of the injured men were admitted to the hospital for definitive treatment as fresh fractures without delay, infection, shock, or surgical meddling. None of these soldiers were combat or evacuation casualties. Old fractured legs with nonunion, mal-union, delayed union, osteomyelitis, circulatory insufficiency and contractures also were admitted for treatment but they were not included in this report of 100 which were recent or fresh injuries. Table I indicates the number of simple and compound fractures included in this report.

TABLE I. 100 FRACTURES OF THE TIBIA

Simple		78 cases.
	Open treatment	33 cases
	Closed treatment	45 cases
Compound		22 cases.

Formerly Major, Medical Corps, A.U.S. This article represents work done at Fitzsimons General Hospital, Denver, Colorado, and has been approved for publication by the office of the Surgeon General. Dr. Day is now on the staffs of United States Veterans Hospital and St. Joseph's Mercy Hospital, and is on the orthopedic staff of Harper Hospital, Detroit, Michigan.

When it became apparent that a large number of fractured legs would probably reach this hospital for treatment, the author reviewed the biomechanics of treatment of the fractured tibia with the purpose of setting up a standard method of procedure to be used in subsequent cases. A fracture is not only a break in the continuity of a bone but also a break in the neuro-muscular, circulatory, articulating and gliding mechanisms of the extremity, not infrequently associated with shock and other serious injuries and diseases. In the treatment of a fracture five points or "R's" are important: Recognition, Reduction, Retention, Restoration of function, and Return to work. In the recognition of a fracture it is essential that the entire bone is included in the x-ray, and in the case of the tibia this should include the ankle and knee joints, since disturbances in the region of the joints may well cause more late disability than any disturbance related to the primary fracture. After reduction is obtained, retention must be absolute, and if this cannot be obtained with the immobilization alone, then additional types of fixation must be used. The restoration of functions begins within a few days after reduction of the fracture and is not delayed until all external fixation is removed. Nonunion may be prevented by recognition of all of these factors at the time of the initial treatment. Soft tissue interposition is evident when the fracture cannot be reduced or, if reduced, cannot be retained. Even without soft tissue interposition there may be failure of good reduction. In some instances, reduction is obtained but there is incomplete bony contact, and this failue of absolute retention leads to nonunion. Traction and distraction may prevent good bony contact and are frequent causes of nonunion. Although it does not have to be severe, circulatory interference may be responsible for nonunion, particularly in the tibia where poor overlying skin and scar tissue may inhibit the normal course of union. In addition, meddlesome surgery may be as prominent in the production of nonreunion as the factors just mentioned.

Treatment of Simple Fracture

In simple fractures of the tibia, before definitive treatment is carried out, a few suggestions may be made regarding transportation. It is believed that a well-padded split plaster splint is the best method of transporting a fractured tibia. Pillow or blanket splints with fracture board reinforcement are,

TABLE II. RESULTS OF CLOSED TREATMENT OF FORTY-FIVE SIMPLE FRACTURES OF THE TIBIA BY MANUAL MANIPULATIVE REDUCTION WHEN NECESSARY AND PLASTER IMMOBILIZATION.

(The fibula was not fractured and provided a good internal splint.)

Bony union	45
Delayed union	3
Limitation of ankle motion	12

however, entirely satisfactory if transportation is over a short distance. Transfixion pins or wires purely for the purpose of transportation are contraindicated, as is a Thomas leg splint with ankle or shoe traction. In transportation of the fractured tibia, immobilization is more important than traction. In the definitive treatment of the fractured tibia, many simple fractures do not require manipulation. The position when first examined is often quite satisfactory, with good bony contact and with minimal if any angulation. If, however, there is displacement and angulation, manual manipulative reduction should be performed. It is unnecessary to use transfixion wires or pins for skeletal control unless there is extensive soft tissue injury from hemorrhage, bruises or other trauma. The os calcis should not be transfixed for prolonged traction because of the possibility of localized infection in the os calcis, which will require treatment long after the tibia has healed. Although this may not be common, it has been seen often enough to warrant a plea against its use. Following reduction, the leg should be encased in a plaster cast extending from the upper thigh to the toes. X-rays should be taken each week until there is no further danger of displacement. If good reduction and retention are not accomplished by these means, then open operation with internal screw fixation is indicated. A more detailed discussion of the treatment following application of a cast will be discussed later. The results of the closed treatment of forty-five simple fractures of the tibia are shown in Table II. Bony union was obtained in every case. Although there was some mild limitation of ankle motion in twelve cases at the time of release from the hospital, it is felt that this probably improved in the following year. It is obvious that late follow-up of military cases is difficult to obtain.

In comminuted fractures of the proximal third of the tibia, it is believed that neither immobilization nor open reduction are procedures of choice because of residual limitation of motion in the knee joint. In these cases, skeletal traction through the distal end of the tibia and the use of an army leg splint with a knee flexion attachment provide a means of beginning motion in the knee joint a few days after injury and prevent the residual limitation of motion. By careful attention to knee motion, such patients obtain a full range of joint motion.

Open Reduction and Screw Fixation of Simple Fractures

If good reduction is not obtained by manipulation, and if immobilization in a plaster cast does not retain the reduction, open reduction is indicated in simple fractures of the tibia. In planning a program for the treatment of these fractures, various types of internal fixation were studied. It is believed that metal plate fixation does not meet the biomechanical requirements in fixation of the fractured tibia.

Metal plate fixation of the tibia (Fig. 1) is condemned in simple fractures for many reasons. Plates are unnecessary because screws alone provide better fixation. In addition, because of the thin soft tissue covering on the tibia, plates favor delayed wound healing. When plates are applied, it is practically impossible to maintain hairline-tight approximation of the fractured bone ends and, consequently, the bone ends are actually held apart thus favoring delayed and non-union. Mechanically, screw fixation alone draws the fractured bone ends together and aids approximation rather than prevents it. In a few instances when a plate is indicated, as in a very comminuted fracture, it is better to use a biological plate, that is, an autogenous bone graft rather than the nonbiological metal plate. This criticism of metal plates is limited in this study to fractures of the tibia, and no discussion relating to their use in other bones will be made in this paper. Kirschner wires, metal bands and pins of various types are also condemned in the treatment of simple fractures for the same reasons.

Operative Technique

Asepsis is respected at all times, and a very careful skin preparation is used prior to surgery. The soft tissues are respected and considerable care taken to prevent damage during surgery. In the elimination of the skin, towels are sutured to the subcutaneous tissue as a simpler and more effective means than the use of various clips. After the periosteum is incised the fracture site is exposed

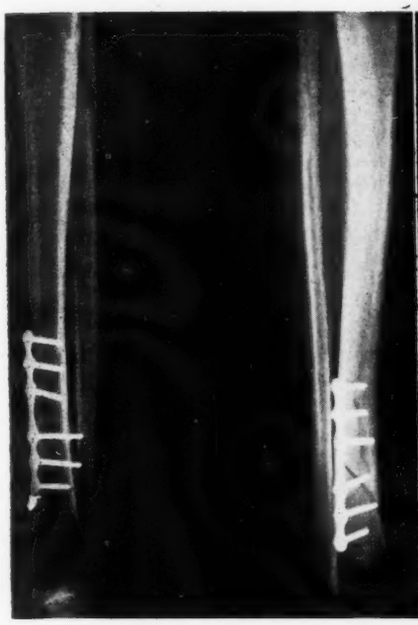


Fig. 1. This case, although not a part of this series of fractures, represents a technique which is condemned.

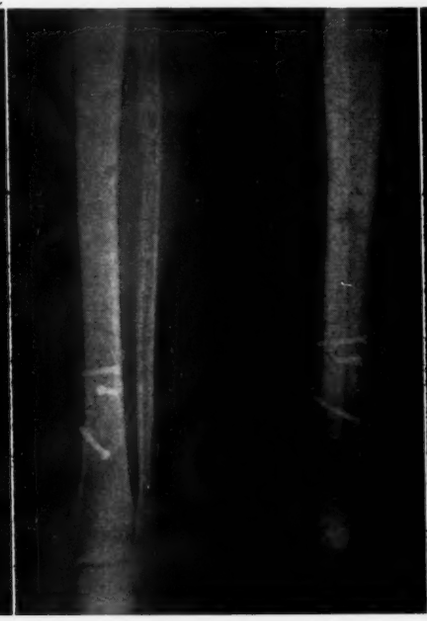


Fig. 2. An oblique fracture of the tibia, reduced and fixed by three screws, shows solid bony union five months after injury.

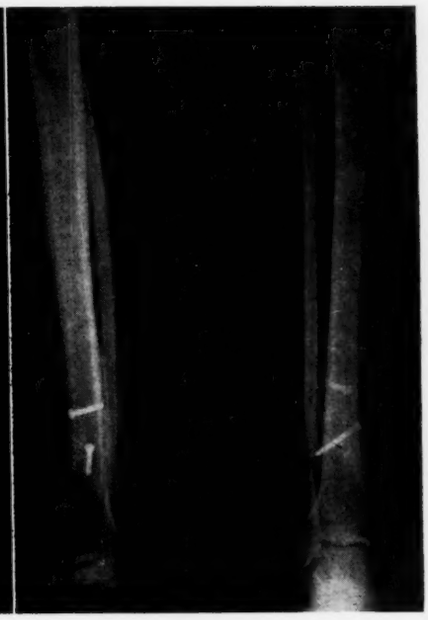


Fig. 3. Comminuted ski fracture of tibia four months after injury.

by subperiosteal stripping. Soft tissue interposition, consisting of fascia, muscle, and blood clots, is removed. If considerable traction is needed, a webbing strip is placed about the patient's ankle and foot and around the surgeon's pelvis, and provides an easy means of reducing the fracture. With the aid of bone clamps, hairline-perfect anatomical reduction is obtained, and is maintained either with bone clamps or with two or more large Kocher clamps. The number of screws and the position of the screws is determined by the stresses required in reducing the fracture. It is important to use the proper size drill, gauge 35, 36, or 37, whichever is smaller than the bore of the screws. Two, three, or more screws, either Townsend and Gilfillan, or Sherman SMO steel, or vitallium screws, are used. The length is chosen carefully so that the screws protrude through the opposite cortex but not too far. On the subcutaneous surface of the tibia the screw heads are countersunk to avoid irritation of the skin. The wound is closed primarily and no drains are used. Following surgery, a long leg plaster cast is applied with the knee slightly flexed and with the ankle and foot in the neutral position. This cast is split longitudinally to allow for edema.

Edema may have disastrous effects, and considerable care, therefore, is taken in its prevention. Edema is biological glue, and prolonged edema causes fibrosis. The extremity is elevated on a wooden elevator covered by a soft pillow, so that the foot is higher than the knee and the knee is higher than the heart. Thrombophlebitis is prevented by encouraging early active exercises of the toes, the thigh muscles of the injured leg, the opposite leg, and of the other body muscles in general. Group exercises should be organized on the fracture wards for this group of patients. In the application of plaster casts, pressure neuritis of the common peroneal nerve must be prevented by adequate padding in the region of the sesamoid bone in the external head of the gastrocnemius muscle, and about the head and neck of the fibula. Proper padding and the generous application of lanolin over the heel, Achilles tendon, and metatarsal heads, prevents pressure necrosis of the skin. Plaster casts should be trimmed so as to allow full motion of the toes. The toes should be mobilized just as assiduously as the fingers are mobilized in the Colles fracture of the wrist, to prevent later contractures and deformities of the toes when a shoe is applied to the foot. In many cases, circulatory insufficiency of the extremity will develop when the patient becomes ambulatory after surgery, and again later when the paster cast is removed. If edema appears, there should be continuous elevation until the edema subsides. After this, such patients should be placed on an "edema program," consisting of intermittent dependent position of the

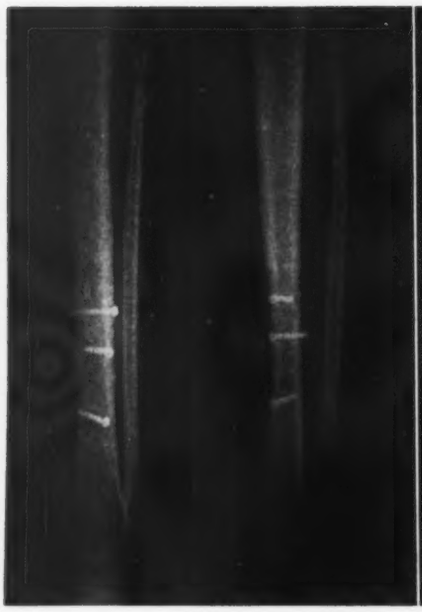


Fig. 4. A long oblique and spiral fracture held by screw fixation six months after injury.

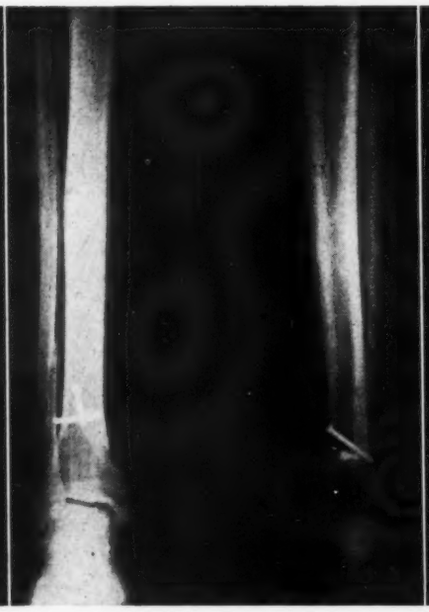


Fig. 5. Spiral fracture, lower tibia, three months after injury, at which time the patient was full weightbearing without brace or crutches.

Fig. 6. Oblique fracture shows union five months after injury.

extremity for one minute each hour during the first day, two minutes each hour the second day, and so on, with elevation of the extremity the remainder of the time and with an increase in the dependent period more rapidly after seven or eight days. Active exercises started the first postoperative day will aid circulatory function. In all of these cases, intermittent partial graduated weightbearing, in a long leg plaster walking cast with a rubber heel attached, is begun between the third and fourth postoperative week (see Fig. 7). It is believed that union is stimulated by this early weightbearing and exercise. Between the sixth and eight postoperative weeks, the long cast is changed to a short walking plaster cast, and this is continued until there is x-ray and clinical evidence of bony union. All splints are then discarded at between three and six months. It is not always easy to determine the presence of firm union, and the clinical test is just as important as the x-ray study, for with a hairline reduction there is frequently no x-ray evidence of peripheral callus formation. After the plaster splint is discarded, knee, ankle, and subastragalar joint motion should be restored by intelligent physical exercise, taking advantage of physiotherapists, occupational therapists for specific function, and industrial therapy.

The results in thirty-three cases treated by open reduction and screw fixation are shown in Table III. Bony union was obtained in every case, and

TABLE III. RESULTS OF OPEN REDUCTION AND SCREW FIXATION OF THIRTY-THREE SIMPLE FRACTURES OF TIBIA

Infection	None
Sinuses	None
Thrombophlebitis	None
Persistent edema	1
Delayed union	None
Non-union	None
Bony union (3 to 6 months)	33
Mild limitation of ankle motion	5
Painful scar	None
Deaths	None

there was no infection and no delayed union. There was some mild limitation of ankle motion in five cases but late follow-up was not obtained. Figures 2 through 7 demonstrate the end results of cases in this group.

If open reduction is necessary and the fracture is transverse, making it difficult to obtain good fixation by screw fixation, it is felt that a sliding autogenous bone graft with screw fixation is indicated. All illustration of this is shown in Figure 8. The author feels that the morbidity associated with such a procedure is no greater than that in open reduction alone, and that it more properly meets the biomechanical requirements than other methods.

Compound Fractures

In the treatment of compound fractures, the same biomechanical principles described under simple fractures is indicated. The cleansing of the wound both mechanically and by irrigation with warm saline solution is just as important as

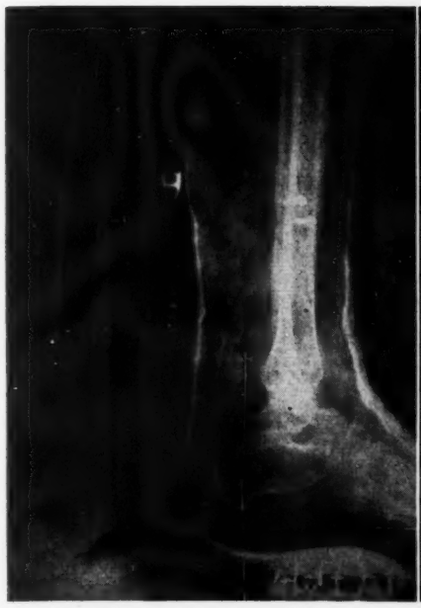


Fig. 7. A spiral fracture of the tibia shows treatment by open reduction and fixation of two screws immobilized in a walking cast with heel attached, in which weightbearing was begun three weeks after operation.

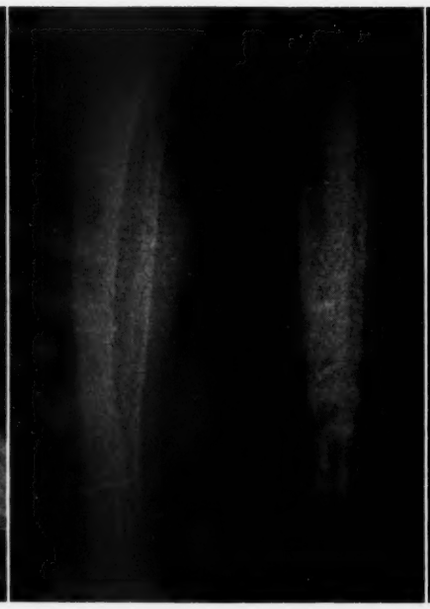


Fig. 8. Transverse fracture of the tibia, treated by initial sliding bone graft and screw fixation, shows solid bony union five months after injury.

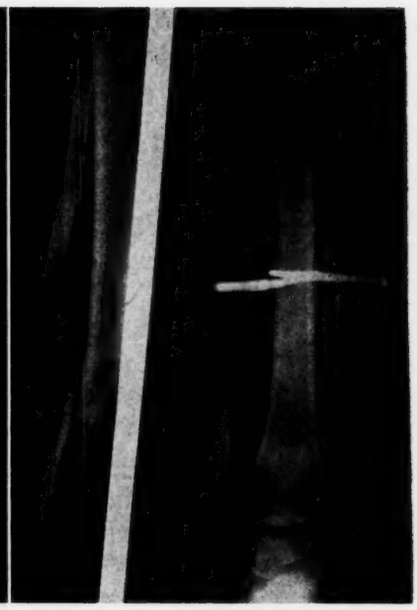


Fig. 9. Compound fracture of the tibia, treated by debridement, reduction and fixation by a Kocher clamp held in place by tying the handles with cotton hernia tape. The clamp was removed after six weeks; the wound healed in two months, and solid bony union was obtained at five months.

the excision or debridement of all devitalized tissue. Here again, anatomical reduction of the fracture is essential. This may be maintained either with an external splint, with transfixion screws, transfixion wires or pins, Kocher clamps, and in some instances, metal plate and screws. If good reduction cannot be obtained by external means, then internal fixation is necessary. In Figure 9, a compound fracture of the tibia is illustrated. This was reduced and held by one Kocher clamp which was allowed to remain in place and was held by tying the handles with cotton tape. After six weeks the clamp was removed; the wound healed rapidly, and solid bony union with perfect reduction was obtained after four months. Vaseline gauze is laid in the wound to maintain an open wound, but it should not be packed into the wound, spreading the tissue apart. In this series, chemotherapy, consisting of various sulfa drugs and penicillin, was used and either tetanus antitoxin or a tetanus toxoid booster dose was given. Bacteriological studies were routine. If there is no evidence of infection manifested either by fever or suppuration, early closure of the wound after four days is indicated. Such procedures may be carried out either by primary suture or by skin grafting. In this way, a compound contaminated anaerobic wound with bone deformity is transformed into a clean open aerobic wound with accurate anatomical reduction, and secure fixation of the fracture and early closure of the wound can usually be performed. In Table IV will be found the results of twenty-two compound fractures of the tibia. Although there was no chronic osteomyelitis, there was local infection in four cases which subsided after several months. There was some mild limitation of ankle motion, chiefly because some of these patients required longer immobilization than was the case in the simple fractures.

TABLE IV. RESULTS OF TWENTY-TWO COMPOUND FRACTURES OF THE TIBIA

Chronic osteomyelitis	None
Local infection	4
Mild limitation of ankle motion	8
Bony union	22

Summary

The basic principles of fracture treatment are reviewed in a study of 100 fresh fractures of legs. This group, although seen under military circumstances, is comparable to the fractured legs seen in civilian life. The results of treatment of these cases are explained by:

1. Good reduction
2. Good retention of reduction
3. Sound biomechanical principles of therapy.
4. Absence of meddlesome surgery.

The author wishes to express his appreciation for the advice, suggestions, and opinions given to him by Dr. Vernon L. Hart, Minneapolis, during the period of investigation and the preparation of this article. In addition, appreciation is expressed to Dr. Udell M. Gessel, Ann Arbor, Michigan, for his aid in the management of these cases, many of which were treated by him.

Preoperative Preparation of Patients with Carcinoma of the Colon

By John C. Scully, B.S., M.D., F.A.C.S.
Chicago, Illinois

SURGERY FOR CARCINOMA of the colon has recently been approached with less apprehension. Three factors have contributed to the lowered mortality and morbidity in the treatment of carcinoma of the large bowel. They are, mentioning them in the order of their importance, the ability to render the bowel contents sterile by the use of succinylsulfathiazole or phthalylsulfathiazole, the detection of anemia and evaluation of serum protein deficiency, and their correction by multiple transfusions preoperatively, during operation and postoperatively.

We have selected four cases of carcinoma of the colon, each at different sites in the colon, to illustrate how these patients did comparatively well after rather formidable procedures.

Case 1.—Mr. H. D., aged sixty-four, a farmer, was admitted to St. Joseph's Hospital in Menominee, Michigan. The history revealed diarrhea with red blood in the stools and intermittent cramp-like abdominal pain three to four days prior to admission March 18, 1945. This patient had lost an undetermined amount of weight.

Physical examination revealed nothing abnormal except for moderate distention and a tender, firm, moveable mass in the lower left quadrant.

Laboratory Examination: Red blood count, 3,500,000; white blood count, 11,000; hemoglobin 64 per cent; differential, normal; and total serum protein, 5.4 mg. Stools showed four plus blood present on gross examination and chemical test. X-ray examination of the colon revealed an annular filling defect at the rectosigmoid (Fig. 1).

This patient's serum protein deficiency was corrected by a preoperative transfusion of 500 c.c. of citrated blood. Amino acids were given orally, and at the time of operation, his anemia and serum protein deficiency had been corrected. Preoperatively, he was placed on succinylsulfathiazole for a week. At operation, the carcinoma was resected and the cut ends of the colon were exteriorized as a Rankin obstructive resection. The clamps were removed after four days, and the spur was cut down at the end of the first week. He had a well-functioning colostomy at the time he left the hospital two weeks after operation, and the colostomy was closed two months following his initial hospitalization.

Since operation he has gained 20 pounds and has normal stools, and re-examination of the colon by x-ray reveals the lumen of the colon at the site of anastamosis to be adequate.

Case 2.—Miss L. W., aged fifty-eight, an office worker, was admitted to St. Joseph's Hospital, Menominee, Michigan, complaining of intermittent distention and cramp-like abdominal pain since November, 1945. In spite of this pain and moderate distention, she continued work until January, 1946, when she had an episode of severe cramp-like pain in the abdomen, marked distention, and repeated emesis. She was entirely afebrile during this period of obstruction.

Physical examination revealed nothing abnormal except for a moderate amount of distention which prevented palpation of any of the abdominal viscera or masses therein.

Laboratory examination: Red blood count, 4,100,000; white blood count, 9,850; hemoglobin, 68 per cent; differential, normal; and total serum protein, 5.8 mg. X-ray examination of the colon revealed an annular filling defect at the splenic flexure (Fig. 2). The obstruction at this point, however, was not complete, since a small amount of barium passed and was seen proximal to the point of obstruction. Since distention was present, she was placed on parenteral fluid, and a Miller-Abbott tube and Wagensteen suction were used to decompress her.

This patient was given a transfusion preoperatively and was placed on phthalysulfathiazole and given amino acids in her parenteral fluids. At the time of operation, her anemia was corrected, the total serum protein was normal, and she was afebrile. The splenic flexure was resected with the carcinoma and the cut ends of the bowel were exteriorized as a Rankin obstructive resection in the upper left quadrant. She was given 500 c.c. of blood during the operation and another 500 c.c. the afternoon following surgery. Her clamps were removed on the fourth day and the colostomy spur was cut down the end of the first week. The colostomy was closed approximately two months later.

Since operation, she has gained 25 pounds, has had no symptoms referable to her initial complaint, and has returned to work.

Case 3.—Mr. C. B., aged seventy, was admitted to Marinette General Hospital on May 1, 1946. For a year prior to admission, this patient had mild spells of cramp-like abdominal pain with very moderate distention. He had not consulted a doctor until two days prior to admission, when, in addition to the cramp-like pain and distention, he developed red blood in the stools.

Physical examination was normal except for a moveable, firm, abdominal mass, palpable just above the umbilicus. This was not particularly tender.

From the Department of Surgery, Medical School, Northwestern University.

Laboratory examination: Red blood count, 3,850,000; white blood count, 7,500; hemoglobin, 64 per cent; differential, normal; and total serum protein, 5 mg. X-ray examination of the colon (Fig. 3) revealed an indefinite filling defect in the mid transverse colon. This filling defect corresponded to the position of the abdominal mass.

Preoperatively, the patient was prepared with phthalylsulfathiazole and parenteral amino acids. The patient was given 500 c.c. of blood preoperatively, and during operation was given another 1,000 c.c. At operation it was found that the carcinoma seen on the x-ray in the mid transverse colon had penetrated the upper bowel wall and a walled-off sinus was attached to the greater curvature of the stomach. There were nodules on the stomach wall at this point and the attachment of the

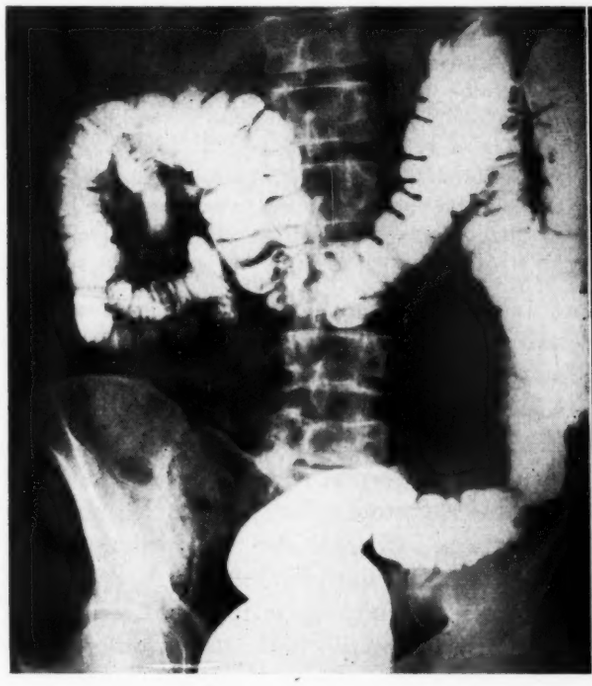


Fig. 1. Case 1. Carcinoma of the rectosigmoid.

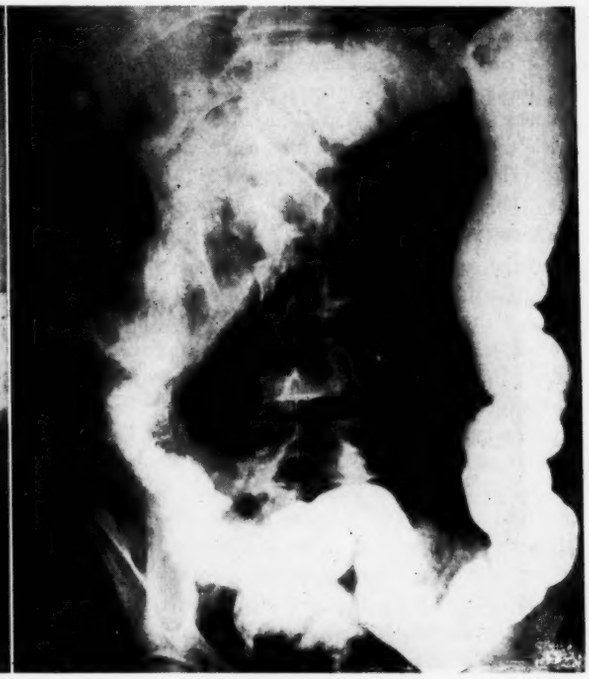


Fig. 2. Case 2. Carcinoma of the splenic flexure.

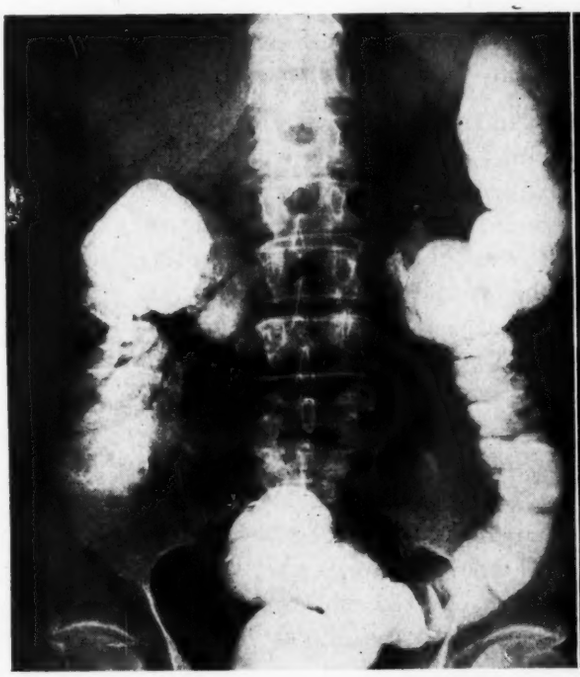


Fig. 3. Case 3. Carcinoma of the transverse colon.

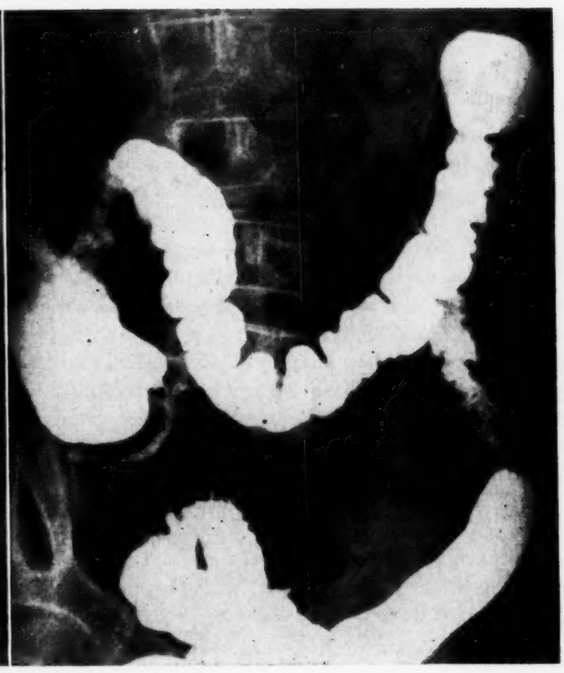


Fig. 4. Case 4. Carcinoma of the ascending colon.

sinus to the stomach was quite firm. Complete resection of the transverse colon was done, followed by a resection of a large V-shaped wedge of the greater curvature of the stomach bearing the contiguous metastasis. The lining of the stomach was explored and found not to be involved. The stomach was then closed, and the hepatic flexure and splenic flexure of the colon were mobilized, and the resected ends of the colon were brought out in the midline as a Rankin obstructive resection. Next, the cecum was freed and a Witzel cecostomy performed, and the catheter was brought out through a stab wound in the right flank.

In spite of the extensive surgical procedure, this patient stood the operation well. However, on the second postoperative day he developed a temperature of 101.5°. Sodium sulfathiazole was given parenterally with his infusions and the temperature subsided. On the third day, after removing the Wagensteen tube, the patient began to vomit, so it was necessary to reinsert the tube and leave it in place for a week. Following this, it was removed and he took food without distress. The clamps were removed from the colostomy after four days and at the end of one week this patient's spur was cut down and he had a well-functioning colostomy. At no time was there any distention. The cecostomy tube was removed in ten days. We plan to close this patient in about two months from the time of operation.

We had originally intended to do a primary anastamosis following the resection of the carcinoma of the transverse colon in this case, but due to the extensive involvement of the stomach, we deemed it inadvisable to take the additional risk which would have been incident to primary anastamosis.

Case 4.—Mr. C. L., aged seventy-six, a night watchman, was admitted to Augustana Hospital, Chicago. This man had absolutely no bowel symptoms, but did have a very marked anemia and weight loss of about ten pounds. X-ray examination (gastro-intestinal series) following his first office visit, August 14, 1945, revealed a duodenal ulcer. It was assumed that his anemia was secondary to the bleeding from his ulcer. The patient was placed on antianemic therapy and medical ulcer management. His anemia was corrected and he felt somewhat better, but shortly after the first of the year, and following a recheck on his blood count, it was noted that his previously normal count had markedly diminished and the red blood count was 2,890,000; white blood count, 7,600; and hemoglobin, 64 per cent. His total serum protein at this time was 4.2 mg. It was evident that, since there had been no melena or hematemesis, there was some other cause for this rapidly developing anemia in spite of therapy.

Physical examination was entirely normal except for marked pallor and evident weight loss. No masses were palpable in the abdomen.

Laboratory examination: X-ray examination of the colon (Fig. 4) revealed a filling defect in the ascending colon.

This patient was prepared with succinylsulfathiazole orally, prior to operation, and three blood transfusions. He was also given parenteral and oral amino acids. At the time of operation, February 15, 1946, his blood picture and total serum protein were normal. At operation, the distal 4 inches of the ileum, entire right colon and half of the tranverse colon were resected. The resected ends of the colon were brought out in the upper right quadrant as a Rankin obstructive resection. The patient was given 1,000 c.c. of blood during the operation and another 500 c.c. the afternoon following surgery. His postoperative course was entirely uneventful, and at the end of the fourth day the clamps were removed and he had a well-functioning colostomy. The spur was cut a week postoperatively.

His colostomy was closed April 1, 1946, and since that time he has had no bowel symptoms and has gained 19 pounds in weight, and in spite of his advanced years, he is again seeking employment as a night watchman.

In each of the above cases there was anemia and total serum protein deficiency which was corrected preoperatively. Each patient was prepared with either succinylsulfathiazole or phthalylsulfathiazole and, with the exception of the one case in which the stomach was involved, the temperature curve postoperatively did not go above 100°. There was soiling of the peritoneum in each of these cases, particularly in Case 3. We attribute this lack of postoperative fever and distention directly to the sterilization of the colon contents with succinylsulfathiazole or phthalysulfathiazole. This opinion is based on comparison of these cases with similar cases of carcinoma of the colon in which the same technique was used and in which sulfaguanidine or other older chemotherapeutic agents were used in preoperative preparation.

In accordance with recently re-emphasized principles regarding the early ambulation of surgical patients, all of these patients were gotten out of bed before the end of the first week, and it seemed to us that they were markedly less asthenic than similar cases in which the serum protein deficiencies had not been corrected or in which their evaluation had been altogether neglected as in previous years.

Summary

Four cases of carcinoma of the colon are presented, one case of carcinoma of the ascending colon, one case of carcinoma of the transverse colon, one case of carcinoma of the splenic flexure and one case of carcinoma of the rectosigmoid junction. Each case had demonstrable anemia and serum protein deficiency. Each case was prepared preoperatively by rendering the bowel contents sterile with phthalylsulfathiazole or succinylsulfathiazole, and correction of anemia and serum pro-

(Continued on Page 1635)

Editorial

A YEAR OF ACCOMPLISHMENT

THE END OF the year 1946 brings time for reflection. On the whole, it has been a year of advancement. As a Medical Society, and as a medical profession, we have made signal progress.

On the national level, the American Medical Association at its annual session adopted a plan of extended and modern public relations, approved a report on a survey of the whole organization by a nationally recognized firm, and appointed the Raymond Rich Associates as public relations counsel. The secretaryship and general managership were changed and the retiring Secretary, Olin West, M.D., was chosen as President-Elect. The Council on Health and Public Relations, the most active Council of the American Medical Association, was given specific and extended duties with definite objectives: to foster and promote nonprofit voluntary health insurance.

Our own State Society has secured an active public relations counsel, has again levied a special assessment for public relations and information, and has allocated most of the money to a very comprehensive and far-reaching program. We shall use radio, the press, personal contacts, speakers bureaus, guiding hands for the public school debate program, and various other means to give our message to the public.

HEALTH LEGISLATION

NATIONALLY WE HAVE fended off temporarily the complete compulsory regimentation of the medical profession. The bureaucratic drive for compulsory health service spearheaded by Wagner, Murray, Pepper, and Dingell, and blessed by Truman, made a determined fight. Hearings were held on the two Wagner-Murray-Dingell Bills and on the Pepper super EMIC Bill in the Senate Committee on Education and Labor. Although these hearings were apparently staged for a purpose, they fell flat and the bills were not reported out of Committee. The opposition, while not given much of a hearing, was too widespread.

A strong factor influencing future action on these bills was the November election which must be interpreted as a public protest against regimentation. Medicine was not the topic of voting; regimentation in general was involved. The elected majority is not for regimentation, and these bills while still having powerful support will have less chance of enactment.

For the past generation, however, there has been a trend looking to various forms of social security. Vast numbers of the public are demanding that inasmuch as medical services are becoming more expensive, and necessarily so, there should be a way to provide these services in adequate measure without too great immediate personal expense. The Miners Union has already made a bargain with the government providing a generous fund for health services, and other unions are already making plans to get as much as Mr. Lewis did. They are not expecting to consider such funds as wage increase, but do demand them as their just due. This is an entirely new concept of employment, even though some employers have for years provided health services for their employes. Some have also included the families.

The profession has abandoned the condition where it gained the reputation of being opposed to all so-called "progressive" legislation. A college professor, in talking a few days ago, made the statement that the profession had bitterly opposed every form of advancement helpful to the people. The first step it opposed was the establishment of health departments. Then it opposed the work for tuberculosis, and other extensions of preventive measures for health prevention. He did not know that the Michigan State Department of Health was established at the insistence of the Michigan State Medical Society. Our public relations have been woefully weak.

But we have now a constructive program for the betterment of the general health of the people. By conference and by combined effort, thinking, and action we have suggested a legislative program which will provide adequate health care for those in every state who are not in position to provide it for themselves. Also this plan makes prepaid security available to all who wish to secure it. For those who do not wish to participate, there is no compulsion. For the medically indigent first class care is available, and the government is not assuming any new burdens. *We are sponsoring the Taft-Ball-Smith Bill,* which does not in any way regi-

ment medicine or health services. The Wagner-Murray-Dingell Bill we should not have to fight much more, and we will not if we get behind our own bill and push it to the limit—being *for something constructive*—not just opposition.

OUR RETURNED VETERANS

THE YEAR HAS seen the return to private practice of most of our soldier members. What we feared might be a problem in rehabilitation has proven to be just what it was after the first world war. The only problem was to get the men back and out of uniform soon enough. There was a demand for their services and a reluctance to let them even take refresher courses. Most of them have had enough of regimentation and are more than eager to re-enter private practice and work as their own bosses. There have been some scattered problems, the most serious one being the reluctance to practice in rural communities as before the war. These rural areas are having difficulty to get doctors. The only answer to such a problem is to make the practice conditions sufficiently attractive to secure doctors.

Senator Taft, in his bill, makes provision for tax-supported retainers in order to make the practice sufficiently remunerative. No doctor can stay in a communitly where he cannot make a reasonable living, no matter what the need for his services.

MICHIGAN MEDICAL SERVICE

OUR EXPERIMENT IN bringing good medicine to the public on a prepaid basis—thus relieving the catastrophic effects of serious illness—has progressed beyond our fondest dreams. We have brought professional services to hundreds of thousands of persons. In doing so, we have an organization with almost a million dollars of resources and reserves, instead of the sad picture of a few years ago when we might have closed shop.

The principle was and is right, and the experience gained must help us in problems to come that may tax our ingenuity to the utmost. No one can foretell the future, but modern American medicine with its yen to give the best possible medical service, and with its added business standards, will foresee and meet future trends. We need not fear too drastic changes in our modes of practice if we use the experience, the know-how, and the ability to lead in any changes which may be forming; we must help do the forming of new plans.

Bearing these things in mind, we fondly anticipate a new year not only with its problems, but with its satisfaction in the consciousness of things well done.

SCHOOLS FOR MEDICAL ASSOCIATES

THE MICHIGAN STATE Medical Society Commission on Health Care at the eighty-first annual session of the Michigan State Medical Society on September 22, 1946, presented a challenging report to the House of Delegates. It was too voluminous to be included in the minutes and too valuable to be lost there in fine print. We have selected this report to appear among the front pages of THE JOURNAL in the place usually occupied by medico-economic problems. We hope those members who did not hear the report will find time to read it (See page 1562).

The Commission has proposed plans looking to the preservation of the medical profession, and the utilization of many skills useful for the relief of illness or disability which by their very nature the doctor of medicine sometimes leaves to others. The experience of the past generation or two is that valuable fields of therapeutics are invaded by poorly trained personnel and are gradually lost to us, or at least alienated from us. Some of the cults have built their philosophy upon neglected activities known to the profession but not generally used sufficiently to hold them in line.

The Commission has outlined courses of study, plans and places for that study which, if adopted, will make available in a practical form services and skills now difficult to find when needed. There is a dearth of trained medical men for the tasks now demanded. They are naturally devoting themselves mostly to the more technical methods and more needful treatments and are inclined in some instances to leave the simpler but also useful services to anyone who will attempt them. By careful training and skillful use, controlled and recognized, much can be done to extend the services of the doctor of medicine, and in a measure piece out his time by his directing others, who have been trained, to give the needed services to awaiting patients under direct medical supervision.

This proposal should have been made, and in a measure was made thirty years ago, but was acted upon only in isolated places with disastrous results. Let us not miss the ball again.

TONSILLECTOMIES AND POLIOMYELITIS

EDITORIAL COMMENTS ON this subject in the September JOURNAL were based specifically upon the edict of various health authorities against the performing of tonsil operations during the season of greatest morbidity from poliomyelitis. The edicts from our State Health Department had been in effect two or three years cautioning that recent operations on the tonsils seemed to predispose to poliomyelitis invasion. This past summer the State Health Department did not issue that warning, but the Detroit Department of Health did. This all provoked some questions, which we propounded in a hope of finding whether there are sufficient grounds for the prohibition of tonsil surgery during the four summer months when that surgery has been most prevalent because of school vacations.

In our department of "Communications" (page 1656), we are publishing in full the answer received from Franklin H. Top, M.D., of the Detroit Department of Health. If we are able to interpret the facts given by Dr. Top, the prohibition against tonsillectomy should have been not against the performance during the four summer months, but against the performance of tonsillectomy at all. It seems that in general his cases of poliomyelitis occurred in tonsillectomized patients at any time in life, and not recent ones. We believe this study should be continued by all means, but we are not yet ready to give up the known good that does result from well-performed and selected tonsillectomies. The numbers of these operations done, and the vast numbers of the population who have had their tonsils removed far outbalance the small number of cases of bulbar poliomyelitis.

We are asked what we would tell the public with this information in mind. Our plan of procedure will continue to be, as it has been for several summers, to put the argument squarely up to the families. We have found that they choose wisely.

STUDY OF CHILD HEALTH SERVICES

THE AMERICAN ACADEMY of Pediatrics has undertaken a study of Child Health Services throughout the United States. In Michigan, the Michigan Branch has undertaken that study by means of a questionnaire, as mentioned in these pages (July, 1946, page 932), which will make another first for Michigan Medicine. In order to complete the survey and the report, it is necessary that all members return the questionnaire. If you have lost or misplaced yours, another copy may be obtained by writing to the State offices at 419 West High Street, Jackson, Michigan. This is a study by the *medical doctors* of Michigan to find out what our medical problem is and to determine how that problem can best be answered. To make the study complete, won't you please help?

ON THE RUN

Suspect allergy when all the paranasal sinuses are hazy to transillumination and x-rays.

• • •

Fever found in heart failure is due to the slowed velocity of the peripheral circulation which is insufficient for adequate elimination of heat from the body surface.

• • •

Lack of oxygen causes increased permeability of blood capillaries all over the body.

• • •

Structural similarity does not mean functional identity.

Selected by W. S. REVENO

HOSPITAL COSTS

In Michigan salary levels constitute most of hospital costs. The average pay roll per patient day actually is $6.55 of the total $11.10 total; 59 per cent of the total expenditures.

Michigan ranks second to California which is highest, $12.85, of which $7.02 is salary; 54.5 per cent.

—Editorial, *Hospitals*, September, 1946

CARCINOMA OF THE COLON

(Continued from Page 1632)

tein deficiency were accomplished by multiple blood transfusions and parenteral and oral amino acids.

Conclusions

Results suggest that preoperative preparation of patients with carcinoma of the colon by the above-outlined methods offer the patient greater postoperative comfort and safety.

References

1. Beilin, D. S.: Radiology, 42:539-544, (June) 1944.
2. Clute, H. M., and Kenney, F. R.: New England J. Med., 233:799-803, 1945.
3. Mattis, P. A.; Benson, W. M., and Koelle, E. S.: J. Pharmacology & Exper. Therapeutics, 81:116, (June) 1944.
4. Poth, E. J.: Surgery, 17:773-780, (June) 1945.
5. Poth, E. J., and Ross, M. S.: Surgery, 16:932-936, (Dec.) 1944.
6. Streicher, M. H.: J.A.M.A., 129:1080-1082, 1945.
7. Thomson, R., and Daland, E. M.: New England J. Med., 234:431-433, 1946.

PROCEEDINGS OF THE MSMS HOUSE OF DELEGATES—1946

Table of Contents

MICHIGAN STATE MEDICAL SOCIETY

Eighty-First Annual Session

PROCEEDINGS OF THE HOUSE OF DELEGATES

Book-Cadillac Hotel, Detroit, Michigan

Sunday Evening Session

September 22, 1946

The first meeting of the 1946 House of Delegates of the Michigan State Medical Society was held in the Book-Cadillac Hotel, Detroit, at eight-twenty o'clock, P. L. Ledwidge, M.D., Speaker of the House, presiding.

THE SPEAKER: The House will please come to order. Is the Chairman of the Committee on Credentials ready to report?

I. Record of Attendance

COUNTY	DELEGATE	MEETING 1st	2nd	3rd	4th
1. Allegan	E. B. Johnson	x	x	x	x
2. Alpena-Alcona-Presque Isle	W. E. Nesbitt	x	x	x	x
3. Barry	A. B. Gwinn	x	x	x	x
4. Bay	R. C. Perkins	x	x	x	x
	W. S. Stinson	x	x	x	x
5 Berrien	D. W. Thorup	x	x	x	x
6. Branch	H. J. Meier	–	x	x	x
7. Calhoun	C. W. Brainard	x	x	x	–
	B. G. Holton	x	x	x	–
	S. L. Loupee	x	x	x	x
8. Cass	B. T. Montgomery	–	x	x	x
9. Chippewa-Mackinac	T. Y. Ho	x	x	x	x
10. Clinton	A. H. Miller	x	–	x	x
11. Delta-Schoolcraft	D. R. Smith	x	x	x	x
12. Dickinson-Iron	G. C. Stucky	x	x	x	–
13. Eaton	A. H. Kretchmar	x	x	x	x
14. Genesee	J. E. Livesay	x	x	x	x
	A. C. Pfeifer	x	x	x	–
	Alvin Thompson	x	x	x	x
15. Gogebic	D. C. Eisele	x	x	x	x
16. Grand Traverse-Leelanau-Benzie	R. T. Lossman	x	x	x	x
17. Gratiot-Isabella-Clare	M. G. Becker	x	x	x	x
18. Hillsdale	L. W. Day	x	x	x	x
19. Houghton-Baraga-Kewenaw	A. LaBine	–	x	x	x
20. Huron	C. W. Oakes	x	x	x	x
21. Ingham	R. S. Breakey	x	x	x	x
	L. G. Christian	x	x	x	x
	Milton Shaw	x	x	x	x
	John Wellman	x	x	x	x
22. Ionia-Montcalm	W. L. Bird	x	x	x	x
23. Jackson	J. J. O'Meara	x	x	x	x
	C. S. Clarke	x	x	x	x
24. Kalamazoo	R. J. Armstrong	x	x	x	x
	L. W. Gerstner	x	x	x	x
25. Kent	R. H. Denham	x	x	x	x
	Harry Lieffers	x	x	x	x
	W. B. Mitchell	x	x	x	x
	L. E. Sevey	x	x	x	x
	A. Van Solkema	x	x	x	x
	A. V. Wenger	x	x	x	x
26. Lapeer	D. J. O'Brien	x	x	x	x
27. Lenewee	H. H. Hammel	x	x	x	x
28. Livingston	H. L. Sigler	x	x	x	x
29. Luce	H. E. Perry	Not Repres'd.			
30. Macomb	D. B. Wiley	x	x	x	x
31. Manistee	E. A. Oakes	x	x	x	x
32. Marquette-Alger	R. A. Burke	x	x	x	–
33. Mason	C. A. Paukstis	x	x	x	x
34. Mecosta-Osceola-Lake	Paul Ivkovitch	x	x	x	x
35. Menominee	K. C. Kerwell	x	x	x	x
36. Midland	H. H. Gay	Not Repres'd.			
37. Monroe	T. A. McDonald	x	x	x	x
38. Muskegon	L. E. Holly	x	x	x	x
	R. H. Holmes	x	x	x	x
39. Newaygo	J. W. O'Neill	x	x	x	x
40. North Central Counties	R. C. Peckham	x	x	x	x
41. Oakland	R. H. Baker	x	x	x	x
	C. T. Ekelund	x	x	x	x
	P. E. Sutton	x	x	x	x
42. Oceana	C. H. Flint	x	x	x	x
43. Ontonagon	W. F. Strong	x	–	x	–
44. Ottawa	D. C. Bloemendaal	x	x	x	x
45. Northern Michigan	W. H. Mast	x	x	x	x
46. Saginaw	L. C. Harvie	x	x	x	x
	C. E. Toshach	–	x	x	x
47. St. Clair	George Waters	x	x	x	x
48. St. Joseph	R. A. Springer	x	x	x	x
49. Sanilac	R. K. Hart	x	x	–	–
50. Shiawassee	C. L. Weston	x	x	x	x
51. Tuscola	Harry Berman	Not Repres'd.			
52. Van Buren	W. R. Young	x	x	x	x
53. Washtenaw	H. H. Riecker	x	x	x	x
	C. Howard Ross	x	x	x	x
	R. Wallace Teed	x	x	x	x
54. Wayne	S. W. Insley	x	x	x	x
	J. J. Lightbody	x	x	x	x
	E. D. Spalding	x	x	x	x
	T. K. Gruber	x	x	x	x
	W. B. Harm	x	x	x	x
	W. S. Gonne	x	x	x	x
	H. B. Fenech	x	x	x	x
	C. K. Hasley	x	x	x	x
	J. A. Kasper	x	x	x	x
	W. L. Brosius	x	x	x	x
	H. F. Dibble	x	x	x	x
	A. E. Catherwood	x	x	x	x
	Richard Connelly	x	x	–	–
	C. F. Brunk	x	x	x	–
	R. L. Novy	x	x	x	x
	H. L. Clarke	x	x	x	x
	W. D. Barrett	x	x	x	x
	R. H. Pino	x	x	x	x
	L. J. Morand	x	x	x	–
	J. H. Law	x	x	x	x
	B. H. Douglas	x	–	–	x
	C. E. Lemmon	x	x	x	x
	J. H. Andries	x	–	–	–
	E. Osius	x	x	x	x
	William Bromme	x	x	x	x
	F. G. Buesser	x	x	x	x
	R. V. Walker	x	x	x	x
	M. A. Darling	x	x	x	x
	C. I. Owen	x	x	x	x
	W. J. Stapleton	x	x	x	x
	W. P. Chester	x	x	x	–
	Arch Walls	x	x	x	x
	E. G. Krieg	x	x	x	x
	D. C. Somers	x	x	x	x
	H. J. Kullman	x	x	x	–
	Douglas Donald	x	x	x	x
	L. W. Hull	x	x	x	x
	L. J. Bailey	x	–	x	x
	F. A. Weiser	x	x	x	x
	C. L. Candler	x	x	x	x
	W. W. Babcock	x	x	x	x
	W. B. Cooksey	x	x	–	x
55. Wexford	L. E. Showalter	x	x	x	x
Speaker	P. L. Ledwidge	x	x	x	x
Vice-Speaker	J. S. DeTar	x	x	x	x
Secretary	L. Fernald Foster	x	x	x	x
Immediate Past President	A. S. Brunk	x	x	–	–

J. J. O'MEARA, M.D.: Mr. Speaker, I have credentials of delegates, which is sufficient to form a quorum, 50 per cent of which is not from any one county.

THE SPEAKER: Thank you, Dr. O'Meara. If there is no objection, this report will be accepted as the roll call of this meeting.

The first order of business is the report on the appointing of the Reference Committees.

Our first committee to be appointed will be our Press Committee: Dr. Harry Dibble, Chairman; Dr. J. S. DeTar; and Dr. L. Fernald Foster.

I would like at this time also to welcome the members of the press and to ask them to show us this year the same courtesy that they have in the past, which courtesy means simply this: that nothing is to be reported without being passed through our Reference Committee.

The other Reference Committee will stand as they appear on page 5 of the Handbook, with these exceptions:

On the Credentials Committee, Dr. G. C. Stucky will replace Dr. B. P. Brown, and Dr. Harold Fenech has been added to this Committee.

On the Committee on Officers' Reports, Dr. W. B. Harm will replace Dr. Henry Carstens, who is now in Philadelphia.

The Reference Committees will please meet immediately after this meeting is over, in the rooms assigned to them. For their convenience, the stenographers will be continuously in Parlor J. It is requested that the stenographers do not be asked to leave the room, that you bring all your reports there for typing.

The next order of business is the Speaker's Address. We will ask the Vice Speaker, Dr. DeTar, to take the chair.

[The Vice Speaker, J. S. DeTar, M.D., took the chair.]

THE VICE SPEAKER: It is a very distinct pleasure to be able to take the chair and present the Speaker of the House to you for his address. Dr. Ledwidge has been Speaker of the House for four past sessions, and we are on the fifth session. In fact, it would be difficult to imagine the House running without Dr. Ledwidge at its helm. It is a great pleasure to present Dr. P. L. Ledwidge as Speaker of the House.

II. Speaker's Address

In these days of collective bargaining, individual irresponsibility, and worldwide unrest, one hears much of "Public Relations"; a term hard to define, an activity difficult to carry out, a project the validity of which is sometimes questioned. As it applies to the Michigan State Medical Society, Public Relations may be defined as an activity of the Society designed to create a better understanding of the mutual problems of our profession and public it serves. This better understanding should be for the edification and benefit of both groups. These questions naturally arise: Is there need for such a program at this time? If so, how should it be set up and how should it be financed?

The answer to the first question seems obvious. The need for a public relations program at this time is urgent. There is grave danger that the practice of medicine as we have known it shall cease to exist, and that some form of governmental medicine will take its place. To prove this statement one needs but to review recent legislative trends.

In the years 1935 to 1944 inclusive, one hundred proposals for some form of compulsory health insurance were introduced into various state legislatures. Over one-third of these were introduced in 1944. In the last session of the California State Legislature, a bill for compulsory health insurance failed to pass by only one vote. President Truman has given his blessing to this type of legislation by including a request for a compulsory health measure in his recommendations to Congress. Our old friend the Wagner-Murray-Dingell Bill, rejected by Congress in 1943, was rewritten and again introduced into Congress last November. Hearings on this bill were held before a sub-committee of the United States Senate with Senator Murray as Chairman in the spring and summer of this year. During these hearings which lasted many weeks, these interesting facts were brought out:

1. The bill was written almost in its entirety by Isadore Falk of the Social Security Board.
2. It has the active support of several large groups of influential people including some inspired members of the medical profession.
3. The bill is misleading in many respects, for example: it purports to give complete medical care to all our people, but reserves to the Surgeon General the right to limit these services. It promises free choice of physician, but in the last analysis the patient may have this privilege only by paying his physician on a private fee basis over and above what he has already paid for health insurance. Literally it calls for no coercion of doctors of medicine; but from a practical economic standpoint, the average physician will be forced to participate or quit the practice of medicine.

When it became evident that the Wagner-Murray-Dingell Bill probably would not pass during the then current session of Congress, a strenuous effort to get the Pepper Bill out of Committee and before the Senate for vote was made. You will recall that this bill provides for care at government expense of all maternity cases and all children up to eighteen years of age regardless of their financial status. It has been estimated that this group comprises about 40 per cent of our total population.

This attempt to get the Pepper Bill out of Committee failed but there is no certainty that the present status will be maintained. It is possible that the President will call a special session of Congress after the November election in an effort to push through these two bills and other similar legislation before January 1.

Thus the seriousness of the situation is easily seen. Some of our members believe that Socialized Medicine is coming in spite of anything we can do to prevent it, and that we are wasting our time and money in offering further resistance. Perhaps they're right. We may lose this fight, but so far these vicious bills have not been passed. So let's keep punching.

The folly of changing from medicine by private practice to governmental, and therefore political medicine, was clearly pointed out in an editorial in the August 9, 1946, issue of *The Detroit News* as follows:

"Since state medicine was originated in Germany sixty years ago, the cost of the program in that country multiplied 100 times, and 50 per cent of the money taxed out of the people to support it was used for overhead administration of the scheme.

England followed with state medicine forty years ago, and the cost of the program has multiplied seventy times.

The secretary of the British Medical Association recently declared that no system of medical care can succeed if it is controlled by the government.

The Minister of Health of New Zealand has said that in the six years of government medicine in that country the system has degenerated into a racket, filling the hospitals with patients with minor ailments, while doctors are losing interest in advanced study and in medical and surgical specialties.

Austria, Italy and France, under state medicine, have given the people inferior medical service, according to Dr. Dublin, of the Metropolitan Life Insurance Co., who recently toured Europe on an inspection of medical needs.

Dr. Dublin adds that "medical care of the people of the United States is the best of any in the world."

Conclusion:—Kill the Wagner-Murray-Dingell Bill, which would create Government-controlled medicine for the people of this country."

It is up to us to see to it that this change to political medicine is not made. The public must be shown that the practice of medicine as a private enterprise is better and cheaper than any form of governmental medicine so far either tried or proposed. The members of our profession must realize that there are some definite weaknesses and defects in our present methods of distribution of medical care. These weaknesses must be corrected to the end that every individual in this country may have necessary medical care at a price he can reasonably afford to pay.

The question of how best to organize and carry on our public relations program is more difficult of decision. In the past two years and especially this year an active program has been in progress. Each one of you has received a pamphlet outlining the work being done in 1946 and submitting a tentative program and budget for 1947. Please study it carefully so that when it comes up for discussion tomorrow night you may be prepared intelligently to approve or disapprove it; and to offer suggestions for better methods of approach.

Some weeks ago each member of The Council was requested to submit to the Finance Committee his ideas as to the best way of financing the public relations program. Your Speaker would like to repeat here the suggestions he made in writing to Dr. E. R. Witwer, Chairman of the Finance Committee, at that time:

1. In order that the common interest of the public and our profession be best served, it seems necessary that we carry on an active public relations program at this time.

2. This program should be financed by a special assessment on the individual members of the Michigan State Medical Society rather than by raising the annual State Society dues.

3. Such assessment should be for the lowest possible amount compatible with the essential needs for the 1947 program.

4. Funds thus raised should be earmarked for Public Relations, subject to special accounting, and should not be considered a part of the general fund.

VICE SPEAKER: The Speaker's Address will be referred to the Committee on Officers' Reports.

(The Speaker resumed the chair.)

THE SPEAKER: It is now my pleasure to call on our President, R. S. Morrish, M.D., for his Annual Address. Dr. Morrish.

III. President's Address

Everyone here this evening will appreciate the changed conditions which again permit us to hold a regular convention of our State Medical Society, and to know that a large part of our membership is home again after an absence of several years in world-wide conflict. Those of us who were left behind to care for civilian needs, have carried on to the best of our ability, though in doing so there has been a startling number of casualties. Likewise those who entered the service of our country have made many sacrifices, and some unfortunately have made the extreme one—Better for all of us that we can be reunited once again, and together carry the torch of organized medicine to new heights of perfection. During the past year it has been my lot to serve as your president, and to assume the duties of that honored position the incumbent can but humbly appreciate the trust you have placed in him and to hope that in some small manner he can justify your decision.

I shall release this office in a few days, and will be succeeded by Dr. William A. Hyland, and let me congratulate you on your good judgment in choosing him for your president in 1946-47. His service to you in past years speaks for itself, and I am convinced he will render good leadership in the coming year which will be an important one from a legislative standpoint. I wish to take this opportunity to compliment your Speaker, Dr. Ledwidge. He has proved himself a capable speaker, and has been very helpful to me during my term of office, and I can truthfully say as much for all of the other officers of our Society.

The past year has been marked with considerable activity by your Society, and our Committees on the whole have done excellent work. I cannot name them all here, nor enumerate all they did. You can get a good idea of their accomplishments by reading their written reports, but I do want to call your attention to two or three of these reports. First, the Ethics Committee: It reports that no meetings were held within the year. At first thought we might wonder why. But the reason for this inactivity is the fact that there were no serious controversies in any of our counties which required attention on a state level. I consider this a healthy state of affairs.

Legislative Committee: Inasmuch as the state legislature was not in session during the year, this Committee was not very active, but in the coming year there will be much for it to do and you may be sure from past performance, this Committee will give good account of itself. I want to point out the importance of this Committee, for The Council has placed the responsibility of leadership in public relations to this Committee, and to the Public Relations Committee. It is charged with the responsibility of investigating any proposed state or federal legislation which might affect the health of the public.

I think the most outstanding progress this Society has made is in the field of public relations. We have secured the services of a Public Relations Counsel whose duties are to consult with officers, and committees, and to carry out their instructions in order that the Public Relations Plan can be actively and effectively implemented. There has recently been mailed to you a booklet setting forth the future plans of the Michigan State Medical Society, and I commend its contents for your careful consideration in order for you to formulate your own opinion on the projects tentatively planned for 1947. Michigan has been outstanding in acquainting the public with its activities in promoting good health, and to offer service protection against the sting of catastrophic illness, and it is most heartening to see similar activities now shaping up on a national scale. The people of this country will be made to see that the medical profession has the public welfare at heart. That it is united in its opposition to philosophies and plans which threaten to lower the high standards of practice which it has voluntarily established for itself and that the control of the medical profession should be limited to the statutes which affect the qualifications of Doctors of Medicine, and to those which provide for ethical conduct.

To demonstrate that our Society has the ability and the will to make whatever study of public need that may arise, is well demonstrated by the activities of our Child Welfare Committee. It co-operated with the American Academy of Pediatrics in its nation-wide study of child health care and services, and did this work on a voluntary basis without aid of government funds.

When governmental agencies come forth with worthwhile and workable plans for the public good, the medical profession is willing, and has the means and proper organization to render a service to government wards, provided the private physician-patient relationship is preserved. Our contract with the Veterans Administration is an excellent example of decentralized government medicine, providing home town medical care to veterans, in which the agency recognizes the problems and rights of the medical profession. It pays according to a fee schedule adopted by ourselves, and has accepted our classification of practitioners which seems to be the fairest and most equitable seen anywhere. This should dispel the accusation that the medical profession is against everything the government proposes. All we ask is a bargaining right and a willingness of the other party to appreciate our ideals and needs, and first of all to determine what the needs of the beneficiary are.

Michigan is a proved leader in the field of socio-economics. Our various surveys have shown what the public needs are in medical care and have solved to a large extent the answer to that need. We have the answer when ill-advised plans are brought forth which would wipe out with the stroke of a pen all that experience we have acquired painfully and at high cost. Excellent care is offered the public at a minimum of operational cost. We must really have something if outside interests want to get in on our health activities. No doubt they see a chance to set up a large controlling machine, a taxing machine if you please, and away goes all that fine spirit of confidence that has existed between doctor and patient through the centuries. Does any one think this taxing group will be an economical body? We'll have none of their planned economy. The public will have none of it either when they get to know all of its implications, and that is the job for our public relations department. To spread the truth! To tell them what our service plans have to offer. And here is where unity of purpose comes in. We have two agencies giving health service. One giving health service proper, and the other hospital service only. One cannot well live without the other. True at times one may be up and the other down and vice versa according to conditions and circumstances. They can and will survive all storms if they stick together. They must be democratic in operation, truly representative of their component parts, and personalities must give way to public need. None of those things is impossible if level heads get together and reason out a cure. And when they come out with a united purpose there will be no pointing of a scornful finger by our legislative minded, and tax minded adversaries who would want to say, "I told you it wouldn't work, we need government medicine." Give them a united front! They won't like it. We have nothing to fear if we keep ourselves right. We have a God-given mission in this world. To heal the sick and its a part of our duty to protect these people. We must make known our purpose and these same people will grapevine the word along to our legislators something like this: "We want good medicine, honest medicine. We want our doctor of choice, just leave him alone."

Now gentlemen you are here to deliberate on quite a number of issues, and resolutions. My term of office will be over in another two days, and it seems presumptious for me to stand here, and tell you what we have done, or what we hope you will do during this session.

In San Francisco, Mr. Upton Close told a meeting of State Officers that we are in big business, 6 billion dollars worth, and, apparently, don't know it. He advised that we play the part—let the people know we are Big Business—let Congress know we are Big Business, and then, and then only would we command the respect that is our due, and likewise would be looked upon as the authoritative body in matters medical.

In electing you as our delegates, we, the doctors of Michigan, feel that the affairs of our Society are in good hands. Certainly the events of the past year have alerted us to our responsibilities as protectors of the public's health and to our need for good citizenship. And in leaving you I wish to express the great pleasure it has given me to be associated with you for six years as Councilor, and the past year as your President, I wish you all God speed in your endeavors.

THE SPEAKER: This report will be referred to the Reference Committee on Officers' Reports.

The next order of business is the Report of The Council, the Annual Report to be given by E. F. Sladek, M.D., Chairman of The Council. Dr. Sladek.

IV. Annual Report of The Council

The Annual Report of The Council for the year 1945-46 appears in the Handbook for Delegates beginning at Page 33. As this report was written July 19 in order that it might appear in print, The Council wishes to submit additional information on matters which it has considered during the past two months.

1. *Uniform Fee Schedule for Governmental Agencies.*—This subject is covered in the original report of The Council (Item 2 on Page 40 of the Handbook).

Secretary Foster addressed the Michigan Association of Boards of Supervisors at its Sault Ste. Marie meeting last Tuesday, giving his audience the background and philosophy of the Michigan State Medical Society regarding its necessary adoption of the Uniform Fee Schedule for Governmental Agencies. Gentlemen, your supervisors now know the story and we believe will be in a more receptive mood to accept this Schedule.

Individual members of a county medical society should not be penalized by being forced to perform services at a financial loss and below the fees either charged for private patients in the areas or those indicated in the Uniform Fee Schedule for Governmental Agencies. Therefore, if your local governmental fee schedules are not comparable to the Uniform Fee Schedule for Governmental Agencies, we urge that you bring to your County Medical Society—for immediate action—the matter of negotiating necessary revisions in schedules of benefits covering governmental wards, as indicated in The Council's recommendation No. 2 (on Page 46 of the Handbook).

Please note that this Fee Schedule now has the approval of the U. S. Veterans Administration, the Michigan State Office of Veterans Affairs, the Michigan Crippled Children Commission, the State Welfare Commission so far as its federal categories are concerned, and that it has been approved in principle by the State Rehabilitation Office. All this has been accomplished in one year's time by the medical profession's presentation of a united front for a just cause.

2. *Michigan Medical Service.*—An up-to-date report on this corporation will be presented to you at the meeting of Michigan Medical Service membership tomorrow (Monday, September 23, 2:00 p.m. in this room). You will also be informed on the present relationships between Michigan Medical Service and Michigan Hospital Service.

3. *Michigan Foundation for Medical and Health Education.*—Since the printed report of The Council (Page 42 of the Handbook), a total of $2,375 additional has been contributed to the fund. Just about 60 per cent of the goal has been reached. The need to build up the Foundation by contributions from doctors of medicine—to prove that medical men favor their own medical and health education fund—is obvious. The Foundation's Board of Trustees is developing a brochure to aid in this work. We invite your attention again to our Recommendation No. 1, on Page 46 of the Handbook.

4. *New Taft Bill.*—An improved Taft Bill will be introduced into the Federal Congress at the next session.

5. *Membership.*—The membership of the Michigan State Medical Socety as of September 15, 1946, totals 4,670, including 1,373 Military Members who are granted remission of dues and assessments for the year 1946. Many of these veterans—those separated from military service during the last half of 1946, or during 1947—will also have their Michigan State Medical Society dues and assessments remitted for the year 1947.

6. *Finances.*—According to Article IX, Section 2 of the Michigan State Medical Society Constitution, The Council is charged with administration of the funds of the Society. Section 3 of the same article reads: "The invested funds of the Society shall be delivered to the Treasurer."

Section 4 of the same article orders The Council to "cause an annual audit to be made of the funds of the Society by certified public accountants." This has been done annually, and routinely published in the JMSMS. The latest report of Ernst & Ernst was published in the March, 1946, issue of THE JOURNAL, MSMS, beginning on Page 382. On this same page is a copy of the budgets of the Society for the year 1946. The audit of Ernst & Ernst is and always has been open for inspection by any member of the MSMS who may call at the Executive Office, 2020 Olds Tower, Lansing.

The report of our auditor for the first eight months of 1946—to September 1, 1946, is as follows:

INCOME AND ACCOUNTS RECEIVABLE: Jan. 1 to Sept. 1, 1946		
Society dues	$34,041.12	
Journal subscriptions (allocation from dues)	5,041.41	
Public Education ($25 assessment)	80,917.28	
Interest received	228.40	
Advertising, reprints & cuts	33,167.91	
Annual Meeting Income	11,040.00	
Total income and accounts receivable		$164,436.12
EXPENSES, Jan. 1 to Sept. 1, 1946		
Administrative and general	$16,816.49	
Society expense	9,490.25	
Committee expense	4,281.63	
Public education expense	38,712.27	
Journal expense	29,486.54	
Annual meeting expense	2,920.72	
Total expenses paid Jan. 1 to Sept. 1		$101.707.90
Balance (cash and accounts receivable)		$ 62,728.22
Cash on hand ($56,065.31) and accounts receivable	$62,728.22	
Estimated expenses of MSMS (including Public Education account) for last 4 months of 1946	46,000.00	$ 16,728.22
Savings Account		$ 13,410.36

Bond account	Cost
(a) General Bond Account:	
American Tel. and Tel.	$ 2,060.00
Dominion of Canada	947.50
Canadian Pacific Railway	1,855.00
Consumers Power Company	1,020.00
Detroit Edison Company	2,187.50
Grand Rapids Affiliated Corp.	920.00
N. Y. Central Railway	1,173.75
Union Pacific Railway	991.25
United Light & Power	925.00
Southern Pacific Co.	850.00
U. S. Savings Bonds Series G	28,600.00
U. S. Savings Bonds Series C	6,900.00

U. S. Savings Bonds Series D	1,131.00	
U. S. Savings Bonds Series F	2,896.20	$52,457.20
(b) Bonds earmarked for Public Education:		
U. S. Savings Bonds Series G	$30,000.00	$30,000.00
		$ 82,457.20

7. *Public Education Account of 1945-46.*—This account, accumulated from the special $25 assessment levied by the 1945 House of Delegates, has been kept separate from the other accounts of the Michigan State Medical Society and has been used exclusively for public relations and for educational purposes, as indicated by the following accounting:

PUBLIC EDUCATION ACCOUNT

Financial Report—January 1 to September 1, 1946

INCOME		
Balance carried over from previous year	$12,150.00	
Income 1/1 to 9/1, 1946	80,917.28	
Total		$ 93,067.28
DISBURSEMENTS		
Salaries	$ 3,979.70	
Rent & Light	70.00	
Tel. & Tel.	369.78	
Printing, Stationery & Supplies	898.90	
Postage	590.58	
Office Equipment	770.42	
Travel Expense	918.71	
Public Relations & Secretaries' Conference	1,586.77	
Purchase of Pamphlets	1,568.26	
Michigan Health Council	5,000.00	
Public Relations Program—Radio	15,375.80	
Newspaper Advertising	6,322.15	
Conference of Presidents	172.17	
National Conference on Medical Service	329.78	
Committee meetings	553.41	
Miscellaneous Expenses	205.84	
Total Disbursements 1/1 to 9/1, 1946	$38,712.27	
Reserve (earmarked bonds)	30,000.00	
		$ 68,712.27
Balance September 1, 1946		$ 24,355.01

In the Public Relations Plan of the Michigan State Medical Society (copy of which was mailed to you on September 14) a financial report for the first six months of 1946 is presented on Page 39. (Note that the financial statement in this Supplemental Report of The Council covers eight months, not six months).

Estimates of the probable cost of the 1947 public relations program of the Michigan State Medical Society, as projected by the Public Relations Committee, are presented in the Plan on Page 51.

8. *Information to the Public.*—Today organized medicine is being forced to carry a greater load in public relations and information to the public than was ever anticipated—even as late as five years ago—by forward-looking medical leaders. During 1947 critical problems will face medicine; we must anticipate a new Wagner-Murray-Dingell bill and requests for broader social security benefits in the Federal Congress; our State Capitol will see many legislative proposals inimical to the people's welfare and to scientific medicine.

The Michigan State Medical Society must realize the threat now and make ready to use all counter offensives that have been developed.

Our progressive public relations program is our best weapon; it must be sustained and made stronger. We have a mammoth job of public relations to do; it must be financed. Our two-fold job of information—first to the profession and secondly to the people—is absolutely necessary. We must continue telling the doctors and every person in the State of Michigan the facts about quality medical service, its wider distribution, and its costs. The medical profession must continue its fight to preserve the private practice of medicine as we know it, in the interests of the people we serve. *A recommendation on this subject follows.*

RECOMMENDATION

1. The Council recommends that the House of Delegates authorize the continuation of the progressive public relations program of the Michigan State Medical Society as outlined in the brochure entitled "Public Relations Plan" approved by the Executive Committee on August 21, 1946, and approved by The Council on September 22, 1946, and that it finance this important and necessary project by a per capita membership assessment of $25 for the year 1947.

E. F. SLADEK, M.D.: Mr. Speaker, may I add a few words?

It has come to our attention that during the past year some criticism has been directed toward the policies of the Officers and The Council of the MSMS. Criticism, principally based upon a lack of knowledge of the activities and the function of the Society. Opinions and criticisms should be based upon facts and not upon ethereal suppositions.

Every effort known to us has been expended in attempts to bring full knowledge of our activities to our membership. Failure to understand just what is going on in medical politico-social activities must be assumed by each individual physician. We, your officers, plead with you, our membership, to read THE JOURNAL of the Michigan State Medical Society; particularly the columns "Editorial Comment" and "You and Your Business." Read the numerous Secretaries' Letters, which are sent to all the membership at intervals throughout the year. Attend your county society meetings and participate in the discussion of the Secretary's Letters which your county officers receive. First obtain the facts: then formulate your opinion.

Medical leadership by the officers of the MSMS is an established fact throughout the whole of the United States. Were it not for the foresight and a tremendous amount of hard work and unnumbered hours of time devoted to consideration of medical socio-economic problems by your officers and the various council committees assigned to the job, you doctors would now be working under the handicap, the directives, and the vicissitudes of the W-M-D Bill. Of this, we are firmly convinced.

Let me interpose my official thanks to all the members of the various standing and special committees of the Council appointed by me for their unselfish devotion of time and thought given to the problems confronting the MSMS.

Two years ago, your newly inducted president, Dr. A. S. Brunk, fully conscious of the lack of interest in efforts to combat national legislation affecting the future of medical practice, conceived the idea of the formation of an organization of presidents and other officers of state medical societies, through which he hoped to stimulate our parent organization into an active legislative program beneficial to medicine.

The eminent success of this new body is proven by its influence upon the Council of Medical Service and Public Relations, which has become the most active department of the AMA. Following the baton of Dr. Brunk's organization, this Council, and its activities, have dominated the discussions and deliberations of the last two meetings of the House of Delegates of the A.M.A.

The results: (1) Propaganda and assistance toward the formation of new prepayment medical service plans and a definite increase in subscribers on a national distribution; (2) development in the lay mind of interest in some form of voluntary health insurance system, as opposed to governmental compulsory plans, (3) interest in positive legislative programs on a national basis, (4) more efficient activities in direct opposition to compulsory health legislation, (5) the reorganization of the mechanical setup of the AMA headquarters, with the formation of a new public relations department.

This, ladies and gentlemen, is medical leadership, and a distinct tribute to Michigan Medicine.

I want to read again the recommendation of The Council in the supplemental report.

"The Council recommends that the House of Delegates authorize the continuation of the progressive public relations program of the Michigan State Society as outlined in the brochure entitled "Public Relations Plan" approved by the Executive Committee on August 21, 1946, and approved by The Council on September 22, 1946."

This is the plan that we have approved [holding up book]. It has been approved by the Executive Committee and The Council as a whole.

". . . and that it finance this important and necessary project by a per capita membership assessment of $25 for the year 1947."

THE SPEAKER: This report will be referred to the Reference Committee on Report of The Council.

We will now hear the report of the Delegates to the American Medical Association, by Dr. L. G. Christian, Chairman of the Michigan Delegates. Dr. Christian.

V. Report of Delegates to AMA

L. G. CHRISTIAN, M.D.: The report will be made in three sections. I will read the written report, and we will ask Dr. Gruber to talk on his resolution, and then we will ask Dr. Henry Luce to give us some of his ideas.

The 95th annual session of the American Medical Association met in San Francisco, July 1-5, 1946.

The House of Delegates was called to order by the Speaker, Dr. R. W. Fouts. The Distinguished Award was given to Dr. A. J. Carlson, of the University of Chicago, who was elected over Dr. Torall Sallman and Dr. Frances Garter Wood of New York. The speaker's address pertained mainly to a plea for unity. This was followed by an address by President Roger I. Lee of Boston and President-elect H. H. Shoulders of Tennessee. Both men reviewed the current problems of the medical profession and urged extension of voluntary pre-payment medical plans to all the states.

The Board of Trustees reviewed its actions for the past year, paying particular attention to the Murray-Wagner-Dingell Bill. Dr. Lee recommended two meetings of the House of Delegates each year to be held in June and December.

As usual, there were numerous resolutions on practically every question that confronts organized medicine. Some did not appear to be germane to the business of the House.

Dr. T. K. Gruber presented probably the most important resolution, urging the American Medical Association through the Council on Medical Service and on Public Relations to interest itself and offer its services to the United Mine Workers and to similar organized regular groups in regard to the newly created fund, created by the Bituminus Wage Agreement. A similar resolution was presented by a delegate from Kentucky, these were adopted and The Council is now attempting to reach some agreement, whereby the profession may lead in health matters among the miners.

A resolution by Dr. L. G. Christian was introduced relative to Medical Care of Veterans. The reference committee deleted all reference to the Michigan State Medical Society and the Michigan Medical question and brought in a modified resolution. A resolution was introduced by Dr. Sargeant from Wisconsin, asking that the By-Laws be amended so that resolutions would be presented to the Secretary of the Association thirty days prior to the meeting of the House of Delegates. The Committee on the Constitution and By-Laws felt that the plan had some merit, thought it did not feel it was wise to write into the By-Laws, but suggested that the resolution be presented to the House and allow the membership to vote on it. This did not carry.

The Board of Trustees reported on a survey on Public Relations and the revamping of the Association as a whole. It was suggested that a Department of Public Relations headed by an expert in this field be established, and that the Editor of the JOURNAL activities should be limited to the editing and supervision of the *Journal of the American Medical Association, Hygeia,* and some of the special journals. It was intimated that he was not to be a spokesman of the AMA. This survey which was given and known as the "Rich Report" was not in full to the House of Delegates, as the Board of Trustees evidently felt that the mental equipment of the Delegates was not sufficient to pass on such a far-reaching document. Instead they asked for the appointment of an Iterim Committee to study the report and report their findings to the House of Delegates in December.

Another resolution introduced by Michigan, commending Senator Taft and his colleagues for the introduction of the so-called Taft Bill, was passed with certain modifications.

Dr. Olin West, who had been Secretary and General Manager of the Association since 1922, and who resigned in April, 1946, was elected President-elect without opposition. Dr. George Lull was elected Secretary, Speaker of the House, Dr. R. W. Fouts of Omaha, was elected over Dr. Lowell S. Goin of Los Angeles by thirteen votes, the closest election for a number of years. Somebody must have put some sand in the well oiled machine, even though not enough. Dr. F. F. Borzell of Philadelphia was elected Vice Speaker, and Dr. Charles Roberts of Atlanta was elected to the Board of Trustees to succeed himself. Dr. Edward McCormick of Toledo was re-elected to the Council and Medical Service and Public Relations.

Dr. Olin West addressed the House following his election and praised the work of the Association, its officers, and employes for the great strides accomplished by the Association in protecting the rights and privileges of the practitioners of medicine in these United States. He also spent some time discussing the hierarchy of the American Medical Association, saying that he had heard of it a great many years and while he had searched diligently and had looked in all the corners and crevices of the AMA he had failed to find any evidence of such a thing existing.

The registration at San Francisco was the largest ever recorded at an annual meeting. There were 7,746 physicians registered.

The Michigan delegation, including Dr. H. A. Luce, Dr. T. K. Gruber, Dr. F. R. Reeder, and Dr. R. H. Denham, who served as an alternate for Dr. Keyport, who was unable to attend, and Dr. L. G. Christian, were present at every session of the House and took active part in the deliberations. The Michigan delegation is pleased to note that other members of the State Society who are delegates from other sections, namely: Dr. Grover C. Penberthy, Dr. Burt R. Shurley and Dr. Jean Pratt, worked harmoniously with the state delegation. They are all keen, able delegates, who are extremely interested in the progress of organized medicine.

Respectively submitted,
HENRY A. LUCE, M.D.
THOMAS K. GRUBER, M.D
R. H. DENHAM, M.D.
FRANK E. REEDER, M.D.
L. G. CHRISTIAN, M.D.

RESOLUTIONS ON MEDICAL CARE OF VETERANS

WHEREAS, The Veterans Administration of the United States, through its medical director, Gen. Paul R. Hawley, has expressed need for assistance and has repeatedly requested aid of organized medicine in providing medical care for veterans; and

WHEREAS, The Michigan Medical Service, an organization founded and sponsored by the Michigan Medical Society as a medium of affording the people of Michigan voluntary low cost medical care of good quality; and

WHEREAS, The medical care to be furnished through Michigan Medical Service is to be rendered by physicians freely chosen by the individual patient; and

WHEREAS, The physicians so rendering medical care are to be compensated on a fee for service basis and to be paid directly by Michigan Medical Service; and

WHEREAS, Michigan Medical Service has entered into a contract with the Veterans Administration for the care of veterans in the state of Michigan suffering from service connected disability; and

WHEREAS, The arrangement not only provides the Michigan veterans with good quality medical service for service connected disability with choice of home town doctor of medicine but as well provides the American public generally with a demonstration of the willingness and ability to provide a practical workable answer to this and similar problems of provisions of medical care without compulsory means or political controls and is productive of good

public relations for the medical profession as evidenced in *Colliers* May 11, 1946, and condensed in the *Reader's Digest* July, 1946, therefore be it,

RESOLVED, That the House of Delegates recommend the Michigan or similar plans for the medical care of veterans to the various state associations and urge them to adopt plans so that good medical care be furnished to the veteran in his house community by the physician of his choice; and be it further

RESOLVED, That the House of Delegates instruct the Council on Medical Service and Public Relations to use its influence and facilities to the states and Veterans Administration in the formulation and activation of these plans.

REPORT OF REFERENCE COMMITTEE ON MEDICAL CARE OF VETERANS

Dr. Stephen E. Gavin, Chairman, presented the following report, which on motion of Dr. Gavin, seconded by Dr. W. R. Brooksher, Arkansas, and carried, was adopted:

Resolutions on Medical Care of Veterans: Your reference committee approves the resolutions introduced by Dr. L. G. Christian, Michigan, modified to read as follows:

WHEREAS, The Veterans Administration of the United States, through its medical director, Gen. Paul R. Hawley, has expressed need for assistance and has repeatedly requested aid of organized medicine in providing medical care for veterans; and

WHEREAS, A number of states through the action of their medical societies have demonstrated the effectiveness of state medical society action in planning and providing for such assistance as requested by the Veterans Administration; therefore be it

RESOLVED, That the House of Delegates recommend that medical societies in each state where no plan is now in effect proceed at the earliest possible moment to adopt a program suited to their particular needs and requirements and designed to fulfill the medical responsibilities of the Veterans Administration to the veteran in the closest conformity to the principles of good medical practice.

Now we shall have Dr. Gruber talk and explain his resolution, as he presented it.

T. K. GRUBER, M.D. (Wayne): Last May, when I was going to Chicago, I noted in the paper that they had settled the coal strike. I don't believe that there are many people in this country who realize what the settlement of that coal strike hinged on. The settlement of the coal strike hinged on a deduction of five cents a ton to take care of the welfare activities of the coal miners. It also hinged on the permission of the Union to not only use the money but such other moneys as they may assess their membership to take care of the medical and hospital bills of these people.

It is my contention that so far as the Murray-Wagner-Dingell Bill is concerned, it is out the window. Mr. John Lewis is not going to pay taxes twice. It has come to my attention that certain of the labor organizations about the country, and particularly those that are active in Michigan, are interested in a ten-dollar car deduction for the same purpose in Michigan.

I hope you will give this careful consideration. I don't think it had dawned on very many doctors what this means. It seems to me that if the American Medical Association and the Michigan State Medical Society and other medical organizations get into this on the ground floor, they may be able to direct the handling of this money.

Again I say, I am convinced that organized labor is not going to be taxed twice.

It all depends on how well this thing is handled by organized medicine as to where we get. The following was introduced in the AMA House of Delegates last July by your Michigan delegate:

WHEREAS, The American Medical Association and this House of Delegates should not attempt to lead in the application of this arrangement now, rather than some years hence discover that organized medicine is at variance with whatever plan is evolved, organized medicine dictated to instead of assisting in the format, therefore, be it

RESOLVED, That the House of Delegates of the American Medical Association accepts as accomplished the National Bituminous Wage Agreement, as far as it involves health and medical service, and be it further

RESOLVED, That the Council of the American Medical Association be immediately authorized to work out the co-operative plan for arranging and putting into operation a plan, and be it further

RESOLVED, That the American Medical Association co-operate in every way in bringing this into fruition.

I hope that this sinks into everybody's mind, because here in Michigan we are going to have a problem.

A meeting has been held since by the Council on Medical Service with a group down in West Virginia. Dr. K. E. Markuson, Chairman, MSMS Industrial Health Commission, and Mr. Ketchum of MMS, were present. I think it might be well if they could bring to this House of Delegates some idea of what went on at that time.

I do feel that this is an important thing. If each one of you will get your *AMA Journal* of July 20, page 984, in each one of your Journals for the month of July or August, you will find the proceedings of the Delegates of the American Medical Association. It will be well worth while your reading it.

I just leave this thought with you, because you are going to have to consider it and maybe fight it as hard as you did the Murray-Wagner-Dingell Bill.

L. G. CHRISTIAN, M.D.: We shall now hear from Dr. Luce, who will make some comments.

THE SPEAKER: Dr. Henry Luce.

H. A. LUCE, M.D.: I am dreadfully embarrassed because this is the first time in twenty-five years that I have appeared before this House without a badge.

Just briefly, to lead up to what happened in San Francisco, in 1933 The Council of the Michigan State Medical Society, or rather its Executive Committee, went over to Chicago to find out what sort of leadership Dearborn Street was attempting toward the medical problems which were facing us. We received no help. We received the usual amount of verbosity that characterizes many of our communications or has in the past at least.

Michigan was not discouraged, and thanks to Dr. Phil Riley, I was one of the individuals selected to make a study in Europe. When we returned from Europe with the recommendation that some sort of medical service be tried out in spot areas, that was published in the Michigan State Medical Society Journal, and a copy of this Journal was sent to every state in the union.

The next AMA meeting was in Cleveland in 1934. I was just as poular down there with the powers that be, as the proverbial skunk at a lawn party. I was called before the Board of Trustees of the American Medical Association and given a grand jury investigation. I was kept standing on my feet for nearly two hours, taking their questions. Nothing was done about it at the Cleveland session.

Michigan kept working along this line that you have worked along, and during all this time I was only a representative or a spokesman for the Society.

Finally, this last year in San Francisco, it appears that the thoughts and ideas that were promulgated by Michigan have finally been accepted. Throughout all of this time there were spot areas in the House of Delegates that have favored it.

The progress in regard to medical service and medical plans in the Committee on Public Relations and Public Health is in good hands, and they are doing a good job.

At this time, Mr. Speaker, I would like to express to the House of Delegates from the Michigan State Medical Society my deep appreciation for all the kindnesses and tolerances with which you have dealt with me, and I can assure you that I shall always keep my interest in medical affairs in the state of Michigan and in the United States.

Thank you, Mr. Speaker.

THE SPEAKER: These reports will be referred to the Reference Committee on Officers' Reports.

We shall now hear from Edward F. Stegen, Associate Administrator of the National Physicians' Committee.

VI. Address of Mr. E. F. Stegen, Chicago

I was very pleased when your Speaker told me that I was to appear on your program at this particular time, because I feel that what I have to say to you certainly comes specifically under the title of Reports, and you have heard reports of your officers, of your AMA delegates, and in the fullest sense of the word I feel that I come before you gratefully to give you a report on the activities of the National Physicians' Committee, in behalf of preserving for the people of this country the great achievements, the great prospects, the aims and the goals of the independent practice system in medicine.

I would be remiss in my first duty if I did not say at the very outset that the National Physicians' Committee is continuously grateful to your great Society and to the committee which was created through the efforts of this House of Delegates a few years ago, known as the Michigan Physicians' Committee of the National Physicians' Committee for the Extension of Medical Service.

To those men, to the officers of the Michigan Physicians' Committee and the men who served on that body, certainly I convey my sincere personal gratitude and that of the Board of Trustees of the National Physicians' Committee.

I am sure that all of us realize that perhaps the greatest period of activity in NPC's program took place during the months of April, May, June and July, in the course of the hearings on the Wagner-Murray-Dingell Bill in Washington. It was our privilege to hold in January a National Professional Conference and Seminar in the city of St. Louis, where we undertook to inform outstanding representative physicians from each of the forty-eight states on the imminence of the hearings; and, secondly, upon a pattern of activity in connection with those hearings. The conference was well attended and I believe accomplished in full its purposes, because in the course of the hearings many of the men who came down to Washington to testify had

an opportunity at least to confer with our people and to be given advice and information on the most recent and daily activities of the Committee on Education and Labor.

In addition to those who came to testify, delegations from thirty-three states came to Washington for the purpose of contacting the Senators from their respective states and talking to their Congressional delegations.

I don't want to spend too much time on the W-M-D hearings because you are very familiar with the work that was done by all the forces of medicine. In conclusion on that point, I would like to say that there has appeared a certain variation of individual motivations. Some of you have had comments by bulletin from Dr. Marjorie Shearon, in which she is unkind in her opinion and expressions of the National Physicians' Committee. That is an unfortunate instance, because Dr. Shearon certainly gave yeoman service to the Committee of the Minority and was an important factor in dealing with the threat of compulsory practices in this conference. However, I have personally felt there was work enough for us all, certainly more work than we could do properly, and there is glory enough for us all, because the bill was soundly and thoroughly defeated, and in that there is glory enough for all.

The educational program of the National Physicians' Committee has been a very greatly expanded program since I had the privilege of reporting to you last. In almost every field, through almost every medium and the use of every technique in the field of public relations and selective group education and mass education, we have moved forward to a very high degree, I think, of effectiveness. I just mention a few of the items so that you will have illustrations of how our work has developed.

As you all know, in the high schools and junior colleges of the country, during this school year, the national debate subject will be on Compulsory Health Insurance. Anticipating this move, the National Physicians' Committee prepared what we have chosen to call the Debater's Package, and in it we have placed a good part of our literature and some specifically aimed at the youngsters, and those have gone out now to the extent of 111,000 pieces. In other words, 111,000 high school and junior college youngsters who are interested in debate have now received medicine's point of view expressed in NPC literature and aimed specifically at their level.

One of the important steps we have taken is the publication of this 196-page book entitled "Compulsion, the Key to Collectivism." Each of you has received a brochure telling about this book, which offered the book free of charge by filling out a card in that brochure. This is slightly out of the pattern of the normal activity of the NPC, this kind of distribution, because we customarily send to every member of the professions—the physicians, attorneys and dentists—our literature or publications free of charge. However, this is a costly book and deals with the hearings on S. 1606. Its seven pages of text point out the extensive developments that led up to the hearings and the great performance of the compulsory insurance, and the 125 following pages give illustrations that prove the facts stated in the text. If you have not asked for a copy, you may pick up one at the back of the room at the close of this meeting. I am fearful that the supply will be exhausted, and those of you who do not get one here, will you please drop us a note, fill out the coupon, send us a post card, call us up, any way at all, tell us you want it and we will be happy to send it free of charge.

In addition to the basic distribution to the professions, to you men who are leaders in organized medicine, if you can effectively distribute two or three or four of these copies, please ask for them and they will be sent gladly without charge.

The National Committee faces a new emergency. During the last few days of the Seventy-ninth Congress, the Reorganization Act of Congress was passed. In that Act, in Section 3 there is a provision that any organization who is active in defeating or in promoting the passing of legislation before the Congress must register with the Secretary of the Senate and report to the House, and report all contributions in excess of $500 that it receives, and report all expenditures in excess of $10.

The Board of Trustees of the National Physicians' Committee has determined to register under this Act and comply fully with its provisions. We move ahead now on a rather restricted basis until we have worked out the techniques and the mechanics of continuing our program under this new legislation.

Just one word, in two minutes, about the task ahead. During this Congress very strange things happened to you, the doctors of this country. First of all, you got the Hill-Burton Bill. You now have a means through which you and the people who are interested in hospital administration and the distribution of the physical facilities of medicine can move forward to provide for those areas in which there is still limited hospital and health center facilities.

Here again, I would like to emphasize the fact that medicine has an opportunity to lead in the same terms that Dr. Gruber spoke of, in the bituminous coal strike settlement. You have an opportunity in the Hill-Burton Bill to lead and to move forward to see that it is not abused and to see that by abuse you do not permit this country to be strapped into a further extension of centralized power over the health of this country.

You also have the Crosser Bill, providing for amendments to the Retirement Act and the Railroad Compensation Act. It provides sickness payments, indemnity payments to workers on transportation through the Railroad Retirement Board. In this law medicine was caught in a relative dilemma, because we have historically approved the cash payment to beneficiary. Although this historic approval would have gone to this bill, there were characteristics about the bill that certainly violate all the concepts upon which the independent practice has been built. I urge you to get a copy of it, read it, look at it, study it, and be prepared to deal with it when it becomes effective on January 1, 1947.

Again looking into the future, there will be another Wagner-Murray-Dingell Bill. There will be four states which will have a compulsory insurance bill, not only introduced vigorously, but fought for and activated by labor leadership. Your state is one. The state of Washington is another. The state of California is a third, and the state of New York is a fourth. In those legislatures after the first of January you can depend on a fight. You can depend on the fact that you are going to have a fight in the Congress of the United States beginning promptly after the first of January. It is going to be a difficult fight because it is going to take two patterns.

First of all, the infiltration system. There will be a Crosser Bill, a bituminous coal strike settlement, all these devious things to piecemeal take the place of the Wagner-Murray-Dingell proposal.

Second, you will have a Wagner-Murray-Dingell Bill proposal on the basis that it is the result of extensive hearings in the Seventy-ninth Congress, and having the advice and counsel of the medical people throughout the country, we present the people with a bill that has all the flaws kicked out of it and everybody will be happy within.

That is a tough fight. Both fights will be tough. I urge you gentlemen to give support to those agencies, to those parts of your own Society, your Public Relathe other agencies attempting to deal with the legislations Program, the National Physicians' Committee, and the other agencies attempting to deal with the legislative threat and who are attempting to deal with the great

problem of class education in behalf of free medical practice. Thank you.

THE SPEAKER: Thank you, Mr. Stegen.

We shall now have the report of the Commission for the Study of Health Care. This Commission was created last year. Dr. Ralph H. Pino is Chairman. We shall hear from Dr. Pino.

VII. Report of Special Commission of House of Delegates on Study of Health Care, Plus Resolution

One year ago the House of Delegates authorized the naming of a Commission on Health Care, the purpose of which was to give consideration to the legal problems of irregular practice, and to related problems of distribution of health care facilities in the field of regular medicine which might need re-evaluation and development.

Your Commission wishes to report their findings in two categories:

A. On the legal status and other aspects of irregular practice.

B. Suggestions for modifying and increasing the distribution of medical care as arrived at from these studies.

SECTION A: THE LEGAL STATUS OF IRREGULAR PRACTICE.

The Council of the Michigan State Medical Society directed the Attorney of the Society, Mr. J. Joseph Herbert, to assist the Commission on Health Care in an investigation of the legal status of osteopathy and chiropractic as relates to the Basic Science Law and to Licensure, and we wish to report as follows:

1. It is the ruling of the Attorney General of this state that the doctor of medicine can use the term Doctor or its abbreviation preceding his name without qualifications. However, osteopaths, chiropractors, optometrists, and chiropodists may use the appelation doctor or abbreviation thereof providing that it is qualified by the type of work being done.

2. We believe, but we have not adequately proven for court procedure, that there have been flagrant violations of the law in licensing in the healing arts in this state, and we believe that consideration should be given, where the evidence seems to justify it, that these violations be brought to the attention of the Attorney General.

We suggest that test cases be tried in the courts. We believe that information on which to base these test cases can be found.

3. We recommend that the collaboration of doctors of medicine with osteopaths be not condoned, except in case of emergency in order to save life, as per recent ruling of the Council of the Wayne County Medical Society.

4. At the meeting with the President of the Basic Science Board, he reported that the Association of Basic Science Boards, a national organization, is working on the revision, simplification, and modification of the Basic Science Laws of various states. We recommend that the Michigan State Medical Society co-operate and support this organization's efforts with reciprocity in view.

5. Your Commission has no authoritative opinion as yet upon which to adequately judge of the legal right of osteopaths in Michigan to practice surgery, and therefore to compare action taken in Nebraska under their laws with the possibilities under Michigan laws; the Supreme Court of this state not having heretofore passed upon the question.

6. Your Commission has insufficient evidence or information upon which to advocate any course of procedure such as was advocated by the California Medical Association relative to a course ultimately intended to assimilate certain schools of irregular practice by modification of educational standards.

7. Your Commission concludes that the whole problem of irregular practice is an aspect of the whole great problem of the distribution of health services.

8. It concludes that as a corollary to the technical science of medicine that there is a science that needs to be defined and developed, to be known as "The Science of the Distribution of Health Services."

9. Your Commission is aware that the scope of its function has been such that we are not able to bring to you some conclusions loaded with action that you have hoped for. We believe however that there is an ultimate solution and that the implications are closely wrapped up in the great economic and scientific problem of Health Care Distribution.

10. We advise that these problems mentioned in this Part A of the report of your Commission on Medical Care be transferred to the Commission to be suggested in Part B of this report.

SECTION B: SUGGESTIONS FOR INCREASING THE DISTRIBUTION OF CERTAIN ASPECTS OF MEDICAL PRACTICE.

The war years have depleted to some extent the number of doctors necessary to care for the people, and though the return of men from the armed forces is filling the gaps again of civilian doctors of medicine, there is a lag in adequate numbers, and will continue to be, due in part to medical graduates having to serve in the Army and Navy for indefinite periods following internships. Added to this we are faced with increasing demands for more doctors in the United States as the need for medical and surgical care is increasingly brought to the attention of the people.

The medical schools can accumulate and process more students into doctors of medicine up to a certain degree, but to maintain even minimum standards there is a limit to this increase. The thinning of the civilian medical ranks during the war together with the people concurrently receiving greater income has made it possible for the irregular practitioners to increase in number and become far more active. The cost of the essential education of the regular medical students of our universities is high. These schools have state and municipal support and even so finances are insufficient. It is obvious therefore that the privately owned and operated schools of irregular practice cannot possibly meet standards above the cheapest type of education, and this is a point that the public should be made aware of on proper occasion.

The accelerated evolution of the science of medicine and surgery with all of the advantages of it in increased health and longevity creates a proportionate increase in cost. Michigan has been a leading state in working out ways and means of meeting some of this increased cost. However, we need to bear in mind that meeting the minimum cost through wage deductions alone will not give all the economic answers, just as medical practice through the Wagner Act or any other government act will not give all the economic or scientific answers. If we do not streamline our methods of application increasingly, as the practice of medicine advances increasingly from the simple to the complicated, we will continue to be in trouble from the standpoint of both economics and distribution.

Let us make a comparison of medicine and engineering. In 1900, only 46 years ago, we traveled with horses and buggies, and while it took a good wagon maker to make a wagon, the making of an automobile required a much different wagon maker. He had to have increased education, and he had to specialize, and as he specialized it took not one engineer but ten, and each had ten subordinates, and then the economic aspect along with the technical went from the simple to the complicated, and an executive had to be added to keep it all co-ordinated.

There were few who could qualify as automotive engineers but as the automobile developed and demands for it increased, while more men had to be educated in engineering as now in medicine, vastly greater numbers

had to be trained as technicians to assist under the direction of the engineers. Because of the training of these assistant technicians we can have automobiles in normal times not alone in great numbers, but at a price vastly less than could be possible if the highly trained engineers did most of the work themselves. Early in the automobile era advertising of travel possibilities and what it could mean to America began to appear as has happened in medicine, and gradually the idea of the inadequacy of the horse and buggy as a means of travel grasped the public consciousness, and with the evolution of the gas engine the concept of travel that had been built up in the minds of the public became a reality, and the automobile has become a necessity in most homes. The science of medicine like the science of locomotion has likewise advanced and has become a necessity in most homes. But have we kept pace with sufficient trained personnel to assist us to distribute our product, as modern society understands distribution? Has not scientific development plus education placed medical and surgical requirements and public demand far beyond the adequacy of the source of supply in terms of manpower in both medicine and dentistry?

Are we going to do our own executive directing? We have made a start in the directing, providing help in the way of financing and developing. Shall we demonstrate ways and means of executive development, not alone as in group practice but even in private practice, or are we going to have the way set up and directed from outside as Bernard Baruch and associates are pointing out to the public in physical medicine? Let us not forget that the old wagon maker was pretty much his own boss, but the modern, highly educated, highly specialized engineer is a cog in a great industrial wheel. He is bought and sold from one company to another as base ball players are bought and sold. A few are highly paid and quite independent—very few. Shakeups take place as recently took place in one of our great companies, and great numbers even of engineers feel the need of social security. That can happen to the highly developed engineers of medicine, but it ought not to and need not to. Medicine and surgery are personal problems that require personal application, but can be delegated to a degree that can preserve both the independence of the doctor of medicine and the personal health requirements of the people.

In every human endeavor when a new idea or a need appears on the horizon there are always those individuals and groups of individuals who try by some short cut to cash in on the basic truths laboriously arrived at and developed through painstaking and conscientious efforts, and so medicine has its irregulars, to say nothing of the quacks who try to cash in by shortcut methods. Here the comparison of medicine and the automotive industry differs somewhat, for a car either runs or it does not, it either stands on a firm financial basis or it does not, and it remains or disappears accordingly. But the practice of medicine involves a combination of mind and body loaded with intangibles, a combination of mechanics, of physics, of chemistry, of psychology, and of the pathology of all of these. Opportunities for a real circus are thus provided for the quack and the irregular practitioner, for he can devote his energies to exploiting the psychological and psychiatric intangibles all the way, and the distance is short from the advertisement of Lydia Pinkham and Pink Pills for Pale People to the courses in salesmanship purported to be given in schools of irregular practice.

In the field of medicine and surgery the quack and the irregular to a very large extent begin where we leave off. They pick up the loose ends and build public interest about them. We need to do our part more fully in making the irregulars live up to the law, but beyond this we need to provide all the aspects of health care for the people in the way we know it ought to be done, enlightening the people more through better public relations and education, then let the people be the judges of whom they will employ.

The Michigan State Medical Society is pioneering in the development of Michigan Medical Service, which is only in the early stages of its possibilities. In addition, from the standpoint of the distribution of medical care, Michigan can pioneer another and equally important phase of distribution and develop another "First." I refer to the need of the development of courses for the training of assistants in the form of technicians or medical associates to assist the doctor of medicine in such phases of health care as such associates can adapt to, in order that the skill and training of the doctor of medicine may become available to more people, and more completely within his practice.

This is not a new thought in the field of medical practice. Only an awakened consciousness of the need of organized interest and co-operation back of our medical schools is new. Twelve years ago the Council of Medical Education and Hospitals of the AMA made a survey of the schools teaching these subjects. The Council on Physical Therapy of the AMA, the American Congress of Physical Therapy, and the American Physical Therapy Association lent their combined co-operation in the preparation of the original standards. In 1939 the AMA published a list and requirements for approved schools for Physical Therapy Technicians. That list included sixteen different institutions including some of our leading universities, and fifteen hospitals. And now that he is gone, we must not forget that John Harvey Kellogg of Michigan, tried and succeeded as well as he could with our indifference, to bring some of the great lessons in physical therapy from Sweden and the Scandinavian countries to America.

Wayne University and the University of Michigan are putting forth effort in this auxiliary field in proportion as a grasp of the need and the organized effort of the dental and medical professions have understood and backed them up. We are told that in the field of the Dental Hygienist alone, that to every one such person as has been trained, three hundred could be used and at high wages. What of all the other associate aspects of medical care?

Nurses were among the first of medical associates. It is interesting that the training of nurses to assist the doctor met with much resistance. Dr. Olin West has stated that when he first began to practice there was much opposition to the training of nurses, the argument being that they would want to take over the practice of medicine, that if they were given training to do more than make beds and carry bed pans they would want to do blood letting and apply leaches. Medicine opposed even nursing during the lifetime of, and in the experience of, the present President-elect of the American Medical Association. Since then nursing has become an indispensable auxiliary of the practice of medicine. Clinical laboratory technicians, x-ray technicians, dietitians, and the dental hygienist have come to stay. How could the public pay for the surgeon to do his own blood count, urinalysis, and other such procedures before every operation, and what an extravagance it would be of the doctor's time.

There are other classes of technicians undeveloped within the field of medicine that our medical schools and universities should next given attention to, fields of health care among our loose ends which have been taken over by others and which by others are being exploited and expanded a little at a time into the whole field of the practice of medicine. The public calls these irregular practitioners "doctors" and that will continue until the science of the distribution of medical care by the regular doctors of medicine catches up with the technical science of medicine for it is an inseparable corollary if we are to keep the practice of medicine modern.

Physical Medicine includes massage, electrotherapy, thermotherapy, hydrotherapy, and other aspects of medical care around which the irregular schools have built their unsound practices of all aspects of medicine. Schools of Medical Associates should include all aspects of

physical medicine appropriate to be handled under the direction of the doctor of medicine. Such auxiliary institutions to the colleges of medicine and dentistry should provide a source of supply of such technicians available to the doctor of medicine and dentist either in single practice or in groups. Many orthopedic surgeons are using massage and physical therapy. Most of us are letting our patients go where they will, directed by the largest neon sign.

Schools of Medical Associates should include so-called Chiropody for the care of the feet. Detailed, not casual, knowledge of the care of the feet is quite as important as the care of the teeth and should be taught in our medical schools. The minor ailments of the feet, ailments which are major from the standpoint of comfort and efficiency, should be handled in the doctor's office. If the amount of work handled by the chiropodists of this country were spread out into the laboratories of our orthopedic surgeons and dermatologists through the supervised employment of medical associates, as these men now supervise their laboratories, the field would then not be half covered. Chiropodists are working overtime in their own offices, taking appointments weeks in advance, and doing everything from the treatment of corns to major surgery. The people go to them and call them "doctor." Foot hygiene and therapy is very important. It is a combination of the specialities of orthopedics and dermatology. To belittle the subject and to say that if the people had any sense and wore proper shoes there would be less trouble with their feet, and therefore they do not deserve the attention of the doctor of medicine, is like saying the people should not get syphilis in the first place, and therefore we will let them go where they will. And to assume, as some doctors of medicine do, that chiropodists are only manicurists of the nails of the feet is to reveal ignorance of the fact that the chiropodist is a surgeon and that the chiropodist practices medicine and surgery. This work should be done under the supervision of the doctor of medicine, as logically and with as much satisfaction both to himself and the patient, as the dental hygienist serves the dentist. He could well be called an orthopedic hygienist. Let us remember that we expect the people to look to us for direction in all matters of health care. Shall another layman or Bernard Baruch have to arise from the ranks of laymen to point out our duty to us in the field also of foot care?

And included in the Schools of Medical Associates should be the subject of Optics. From high in the office buildings to the basement of department stores, from corners of jewelry stores to booths on the street, optometrists are being called "doctor," and millions of the public think they are doctors of medicine. They are examining eyes, fitting glasses, and putting in drops, drops of murine, boric acid, and plain water. The patient thinks he is being examined, diagnosed, and treated, and when he goes blind from glaucoma that glasses and murine do not cure, he tells of the "doctor" he has been to, and the connotation is that he is a doctor of medicine. We have some doctors of medicine, whose understanding of organization is so poor that they would teach these men in jewelry stores to diagnose disease, the idea being that it would increase medical distribution, or perhaps cover up our own failure to take care of the people.

We, the doctors of medicine, are to be blamed for the optometrists, if there is any blame. We are not doing the work ourselves. We are highly trained engineers doing what we can ourselves, but unlike the automotive engineers, do not supervise enough tool makers and other assistants to take care of three patients under the supervision of the doctor of medicine instead of one. Of course, in the very process of the people learning that they need eye care, they will complain that they can't get it and they will vote for the politicians who hope to provide it in the form of the Wagner Act and the like.

In all of this consideration of the need of the development of Medical Associates, let us remember also that the very nature of the work of the doctor of medicine is such that to a very great degree he is as successful as he is skillful, and he is in large part as skillful as he is experienced. The professor at the head of a department and a clinic in a medical school has his experience multiplied by the number of the hands and the skill of all who assist him. He does not depend upon his own two hands alone, and so his experience and skill is multiplied. He can devote his attention and his skill to the more important thinge while watching and directing those with less educational requirements, but who nevertheless through experience become minutely skillful, thus advancing the success of the whole.

This type of organization need not apply only to the professor in a medical school and clinic. It is as applicable to the clinic of the doctor of medicine with offices in the city, and to the practitioner in the remote village. And let us remember also that, as with the making of the automobile, medical care becomes less costly to the patient and more complete as the doctor organizes his business to delegate, but to supervise, certain services. And at the same time that he cares for more people and more satisfactorily to all concerned, he enhances not alone his own skill but his own income, and while doing so, he gives employment to associates with good income. The people would rather come to regular doctors than to the irregulars when they learn the truth. By this method the people will support fewer and fewer irregulars, and the irregulars and their schools will become fewer and fewer and fewer constantly to the best health interests of all of the people.

What is the answer? May our universities not develop Schools of Medical Associates to work with and under the direction of the doctor of medicine, as does the nurse, the clinical laboratory technician, the x-ray technician, and the dental hygienist? In the present state of the evolution of Medical Associates, the following divisions are clearly defined, and many others will follow.

I. The Division of Clinical Laboratory Assistants.
II. The Division of Dental Hygiene.
III. The Division of Dietetics.
IV. The Division of Medical Secretaries and Librarians
V. The Division of Medical and Surgical Art and Photography.
VI. The Division of Occupational Therapeutics.
VII. The Division of Ophthalmic Associates.
VIII. The Division of Nursing.
IX. The Division of Orthopedic Associates.
X. The Division of Physical Medicine.
XI. The Division of X-Ray Technicians.

What a galaxy of educational opportunities to lay in bulletin form before the high school and college student in choosing a vocation! The medical profession has been so careful and properly so, of advertising what it has to offer, that on the library tables of our schools—announcements, bulletins, and catalogues of the schools of irregular and questionable practice are attractively displayed, while one has to seek diligently to find at all what we have to offer in thick catalogues. Then it is barely outlined and buttressed with so many requirements that if found at all, it is largely ignored. With the crying need for nurses, we found one of our largest hospitals without even a catologue, and they have been without one for several years!

We must educate more young men in the field of medicine, and for every one we must educate at least one medical associate, and our judgment is that it will require several. It is much more satisfactory to use this kind of added help and in large numbers in the aggregate than great numbers of government clerks, in increasing medical care. Many of us now use several medical associates. When the automotive engineer makes all the car himself, and the doctor buys such a car, if he can, then we can expect to go on and do all the work

ourselves, and the people will employ us if they can. Shall we keep up our end in a progressive world? Or do we lack organizing ability? If we do not streamline our business it will be streamlined for us by people who do not know how.

But some may ask isn't it a fact that our medical schools already exceed the budget provided by the universities? Probably so, but when business discovers the possibility and the use of plastics or of refrigeration, our universites put in courses in these. The medical profession must present this problem squarely, intelligently, and realistically to our universities. We must back up the Deans of our Medical Schools, and not leave the problem of getting budget increases wholly to them. It is our problem if we hope to direct methods of medical distribution. Through proper public relations which in turn creates public opinion, the taxpayers are willing to support education that gives value received. It supports a lot of education that gives doubtful value received as compared with health care.

We must assume the responsibility for ways and means of caring for the health interests of the people. We must work and supervise work, or we will work and be supervised. Our public relations may be better if we give more emphasis to what we will do, and less emphasis to what we will not do, both in science and economics. Rather than to condemn the Sister Kenny treatment, to say that we will investigate it and use all of it that research proves to be good, is both good public relations, and good medicine. Let Michigan provide another "First"!

Your Commission on Health Care presents certain exhibits for the purpose of visualization. It is a very limited example of the extensive material available in the development of schools of "Medical Associates," having in mind that such schools do not have to be housed in single buildings, but that under the direction and leadership of our medical schools, all the facilities available, now in process of teaching, and to be developed, from hospital facilities to university class rooms and laboratories, can form the nucleus of Schools of Medical Associates.

Your Commission on Health Care therefore presents the following Resolution

Resolution:

WHEREAS, The science of medicine has so advanced and the possibilities of its application have become so increasingly extensive,

WHEREAS, This places not only increasing responsibilities and opportunities on the General Practitioner but also requires increase constantly in new specialties and in the responsibilities and opportunities of these specialists,

WHEREAS, Such advance makes increasingly possible better actual and potential health care of the people and is the essential factor in increased longevity,

WHEREAS, The application of extensive scientific principles of medicine and surgery can be comprehensively, adequately, and safely carried out only by or under the direction of those basically and specifically trained through modern medical education,

WHEREAS, This medical education requires necessarily many years and great expense,

WHEREAS, If modernly applied this makes medical care under any system whatever increasingly expensive if distribution is not scientifically modified,

WHEREAS, With all the long and expensive basic training and developed skills, the doctor of medicine has but two hands with which to distribute medical care,

WHEREAS, This fact limits his opportunities not alone in distributing the skills that he has developed at so great a cost in time and effort, but limits also the opportunities of accelerated development of his skills,

WHEREAS, Experience has now accumulated, demonstrating that under the direction of the doctor of medicine through medical associates, the distribution of medical care can be immeasurably enhanced and at less cost, because of less cost in the education of such associates,

WHEREAS, Some therapeutic procedures of limited value have been exploited by groups basically untrained but calling themselves "doctor" and confusing the public mind in problems of health care,

WHEREAS, We should be in position through research and personnel under the direction of the medical profession to search for, examine, and bring to the people every vestige of possible or proved additions to health care,

WHEREAS, Young people in our colleges and universities are looking for vocational opportunities, and such opportunities can be most attractively further organized and catalogued for their choice in association with the medical profession,

WHEREAS, The science of the distribution of health care has become a necessary corollary of the theory and practice of scientific medicine, therefore,

BE IT RESOLVED, That the Michigan State Medical Society in co-operation with the Universities of the state of Michigan, set up an over-all Commission to be known as "The Commission for the Study and Development of the Science of the Distribution of Health Care," and,

BE IT FURTHER RESOLVED, That the various schools and teaching facilities of Medical Associates now in existence and in the process of formation, can be so organized and catalogued as to furnish the medical profession such assistance as to make increasingly the science of the distribution of medical care along with medical science, more comprehensive, usable, and effective.

This can be one answer to better public relations. It can help to make it unnecessary for the people to seek counsel of irregular practitioners.

THE SPEAKER: Thank you for this report. The resolution will be referred to the Reference Committee on Resolutions.

Are there further resolutions?

VIII. Resolutions

VIII—1. MEDICAL VETERANS' PRIORITY IN PURCHASE OF SURPLUS SUPPLIES

DOUGLAS DONALD, M.D. (Wayne):

WHEREAS, In setting up medical offices it has been difficult for veterans to purchase essential equipment from the usual private sources; and

WHEREAS, There is considerable medical surplus property which was used by medical installations of the Armed Forces during the war and which is now stored in warehouses; and

WHEREAS, Since there is a shortage of practicing physicians, it is necessary for the public health that the medical veterans be properly equipped to serve their patients; and

WHEREAS, Veterans have priortty for surplus medical material, therefore be it

RESOLVED, That the Michigan State Medical Society be asked to request the governmental agencies concerned to simplify the entire procedure for obtaining surplus property in order that all former officers of the Medical Corps may be given priority in purchase of available medical equipment.

THE SPEAKER: This resolution will be referred to the Committee on Resolutions.

VIII—2. MEDICAL VETERANS' AFFAIRS—CREATION OF MSMS COMMITTEE ON

E. D. SPALDING (Wayne): I have here a resolution also concerning the veterans.

WHEREAS, The aftermath of the war has left many problems affecting veterans, some of which are of vital concern to the medical profession and are likely to require action on a state level; and

WHEREAS, Veterans' affairs are certain to increase in importance with each succeeding year; and

WHEREAS, The best interests of the medical profession will be served only if veterans' problems are under constant study and the latest information is available on the numerous ramifications of such problems; and

WHEREAS, It would appear that the most efficient method for the Michigan State Medical Society to achieve these ends and also to maintain adequate liaison with the Veterans Administration and Veterans Organizations on matters of medical policy is by means of a special committee, therefore, be it

RESOLVED, That the House of Delegates of the Michigan State Medical Society favors the appointment of a State Veterans' Affairs Committee; and be it further

RESOLVED, That the members of such a committee should be composed of veterans.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—3. AMA CONTRIBUTION TO HEALTH EDUCATION PROJECTS

R. W. TEED, M.D. (Washtenaw): I have been instructed to present this resolution by the Council of the Washtenaw County Medical Society.

WHEREAS, The Michigan State Medical Society has supported a program of Health Education during the past five years, and

WHEREAS, Such Health Education is not purely of local, but also of national interest and value, therefore, be it

RESOLVED, That the delegates of the Michigan State Medical Society to the American Medical Association be instructed to initiate a study of a policy by which the American Medical Association would contribute a portion of the cost of such a program of Health Education carried on by any State Medical Society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—4. RECOGNITION OF VALUABLE SERVICE TO MEDICINE BY DR. H. A. LUCE

W. W. BABCOCK, M.D. (Wayne): I would like to make a remark prior to introducing this first resolution. I feel highly honored in being delegated to offer this resolution to the House.

WHEREAS, For eighteen years Dr. Henry A. Luce has been an able and conscientious delegate from the Michigan State Medical Society to the National organization. During the past summer Dr. Luce addressed a letter to the Wayne County delegation in which he asked that he should no longer be considered a candidate for that post. In his letter he expressed his ideas of the qualifications of a delegate, and

WHEREAS, In reading them one is conscious of the high degree in which Dr. Luce's services as a delegate were a living exemplification of these qualifications. To quote in part—"He should be one who holds the fundamental principles and ethics of the profession as his basic characteristics." "He should place the good of the whole above his personal desires." These words well describe the man who now asks to be allowed to step aside; a man who has always justified the confidence we have placed in him, and

WHEREAS, Because of the unselfish service which he has given our State Society and the entire profession, and because we desire to express in some measure our recognition of his work,

BE IT RESOLVED, That the Michigan State Medical Society does hereby thank Dr. Luce for his many years of work as a delegate, and expresses its regret that he feels his work in this capacity must end, and

BE IT FURTHER RESOLVED, That a copy of these resolutions be sent to Dr. Luce.

THE SPEAKER: This resolution will be referred to the Reference Committee on Officers' Reports.

VIII—5. MEDICAL OFFICERS' PROCUREMENT BY RATIO

W. W. BABCOCK, M.D. (Wayne): Another resolution.

WHEREAS, During World War II the American Medical Profession unhesitatingly answered the call of the Armed Forces for medical personnel and abided by their decision as to the number of physicians needed; and

WHEREAS, More than one-third of the entire medical profession entered the armed services leaving a dangerous scarcity of physicians to care for the civilian population; and

WHEREAS, In planning for any future national emergency the health requirements of the civilian population must be given greater consideration because of the greater likelihood of enemy action against our industrial centers; and

WHEREAS, The medical personnel requirements for the Armed Forces in World War II were on the basis of 7.5 medical officers per 1,000 men or one for every 133 men; and

WHEREAS, It is the general belief of medical veterans that this ratio could be materially reduced if medical officers were used solely where their professional training and experience was justified and were replaced by Administrative Officers in all duties where medical knowledge was not essential, and if more efficient methods of employment of medical officers were devised; therefore

BE IT RESOLVED, By the House of Delegates of the Michigan State Medical Society that, in their opinion, the Armed Forces should consider doctors of medicine as a national resource, highly limited in numbers, that must be carefully husbanded in time of war and therefore urges the Surgeons General of the Army and Navy to consider in their future planning the foregoing facts with the end in view of revising their estimates of need for medical officers and by establishing such auxiliary services as the Medical Service Corps, substantially reduce the ratio of medical officers required in time of war; and

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the President of the United States, the Secretaries of War and Navy, the Surgeons General of the Army and the Navy, the Chairman of the Senate and the House Military Affairs Committee and to each Congressman and Senator from Michigan.

THE SPEAKER: That will be referred to the Reference Committee on Resolutions.

VIII—6. STATUS OF SURGEONS-GENERAL

WILLIAM BROMME, M.D. (Wayne): The text of the following resolution was prepared by the American Veterans of World War II, and referred by the Delegates of Wayne County to this delegation for its consideration.

WHEREAS, Approximately 10 per cent of the personnel of the Army are members of the Medical Department, and

WHEREAS, In modern warfare, the care of the sick and wounded and the many ramifications of evacuation and hospitalization are major factors in the success of land or amphibious operations; and

WHEREAS, Food, clothing and supply have important and far-reaching medical aspects; and

WHEREAS, In the past because the Surgeon General of the Army has been limited to offering technical advice only, the use of his broad experience has not been fully utilized in the formulation of major plans and training, therefore

BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society strongly urges that the Surgeon General of the Army and of all other divisions of National Defense be made a member of the General Staff with a status co-equal to that of other major subdivisions of the General Staff; and

BE IT FURTHER RESOLVED, That a copy of this resolution be forwarded to the President of the United States, to each member of Congress and to each Senator from Michigan, to the Chairman of the House and the Senate Military Affairs Committee, to the Secretary of War, and to the Surgeon General of the Army.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—7. ESTABLISHMENT OF GENERAL PRACTICE SECTIONS IN APPROVED HOSPITALS

ARCH WALLS, M.D. (Wayne):

WHEREAS, The House of Delegates of the American Medical Association has established an individual section on the General Practice of Medicine; and

WHEREAS, The General Practitioner has been recognized as a separate branch in the medical profession; and

WHEREAS, This group has shown its interest in its Section by registering 939 members in the Section at the 1946 American Medical Association meeting in San Francisco; and

WHEREAS, Their scientific section meetings were well attended; and

WHEREAS, The House of Delegates has already voiced its approval of such sections in the separate state and county societies that are component parts of the American Medical Association; and

WHEREAS, Sections on General Practice have been started in some recognized hospitals that are approved by the American College of Surgeons and the Council on Medical Education, and Hospitals have been accepted by these bodies; and

WHEREAS, many hospitals have not established General Practice Sections in their visiting active staffs and their governing heads are doubtful whether such action has the approval of the bodies which set up the rules and regulations for the approval of their hospitals for interns and residents; therefore,

BE IT RESOLVED, That the Delegates of the Michigan State Medical Society in convention assembled voice their approval of the establishment of Sections of General Practice in approved hospitals and that the Delegates from Michigan to the American Medical Association House of Delegates introduce a similar resolution at the next meeting requesting approval of that body; and

BE IT FURTHER RESOLVED, That a copy of this resolution be sent to the Hospital Committee of the American College of Surgeons with a request that their body voice approval of such Sections and include such in their Manual of Hospital Regulations.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS EMERITUS, LIFE, ASSOCIATE, RETIRED

J. J. LIGHTBODY (Wayne): These resolutions have to do with special memberships in the Michigan State Medical Society.

WHEREAS, The following doctors have attained the age of seventy years and have maintained active membership in good standing for ten years or more in the Wayne County Medical Society and the Michigan State Medical Society, be it, therefore,

RESOLVED, That Drs. Bruce Anderson, Joseph H. Andries, Robert Beattie, Noah Aronstam, W. E. Blodgett, Harry J. Butler, Maria B. Coolidge, Duncan A. Campbell, Henry W. Cadieux, James H. Dempster, H. C. Emmert, William F. Hamilton, Joshua Hanser, A. Hughes, J. P. Jaeger, William J. Jend, G. B. Lowrie, Willard Monfort, John B. Morton, R. Johnston Palmer, Walter G. Paterson, C. F. Pequegnot, Charles A. Reinbolt, E. O. Sage, Robert Shaw, W. J. Stapleton, R. S. Taylor, W. E. Tyson, A. B. Wickham, and Walter J. Wilson, Sr., be transferred to Life Members' Roster by election in the House of Delegates.

THE SPEAKER: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-Laws.

J. J. LIGHTBODY, M.D. (Wayne):

WHEREAS, John D. Boehm, M.D., West Branch, Michigan, has retired from active practice of medicine; and

WHEREAS, Dr. Boehm has maintained his membership in the Michigan State Medical Society for a period of ten years as prescribed by the By-laws; and

WHEREAS, The Council of the Wayne County Medical Society has accredited Dr. Boehm with special membership recognition, therefere, be it

RESOLVED, That the name of John D. Boehm, M.D., be placed on the list of retired members of the Michigan State Medical Society.

THE SPEAKER: This resolution will go to the Reference Committee on Amendments to the Constitution and By-laws.

J. J. LIGHTBODY, M.D. (Wayne):

WHEREAS, E. Hobart Reed, M.D., is temporarily out of active practice on account of protracted illness; be it therefore

RESOLVED, That Dr. Reed be placed on Associate Membership files of the Michigan State Medical Society for the period of his illness.

THE SPEAKER: This will also go to the Reference Committee on Amendments to the Constitution and By-laws.

J. J. LIGHTBODY, M.D. (Wayne):

WHEREAS, The following doctors are all Honor Members of the Wayne County Medical Society, and

WHEREAS, These doctors have all engaged in the active practice of medicine for fifty years and have been members in good standing of the Michigan State Medical Society for twenty-five years or longer as prescribed in the By-laws; therefore, be it

RESOLVED, That Drs. Alexander Cruikshank, Karl Dubpernell, Hugh Harrison, Arthur Northrop, Edward J. Panzner, Burt Shurly, and Alexander Thomson be elected by the House of Delegates to Emeritus Membership in the Michigan State Medical Society.

THE SPEAKER: This resolution will also go to the Reference Committee on Amendments to the Constitution and By-laws.

VIII—9. THE HUMANE USE OF ANIMALS FOR SCIENTIFIC PURPOSES

B. H. Douglas, M.D. (Wayne): From time to time the medical profession must protect certain of the rights that it has carried out over a period of years through the problem of having available animals for the use of scientific experimentation. We have been threatened again in Michigan with interference with this right, and it is therefore timely that we present the following resolution. Tomorrow a case comes up in Detroit that will, if the ones bringing the suit are successful, stop the use of dogs in experimental work in our two great universities to a very large degree, by interference with the sale of dogs from the Detroit Dog Pound for scientific purposes.

Therefore, I present this resolution with the recommendation from the Delegates of Wayne County.

Whereas, The maintenance of standards of health and the treatment of the sick is the obligation of the medical profession; and

Whereas, Medical progress is dependent upon research for fundamental knowledge relating to the eradication of disease; and

Whereas, The present high standards of medical care are largely dependent upon the humane use of animals for the purpose of furthering our knowledge of disease, for the standardization of drugs, for normal teaching procedure and for diagnosis; and

Whereas, There is an effort on the part of erroneously informed individuals to interfere with the orderly and necessary humane use of animals for experimental purposes; be it therefore

Resolved, That the Michigan State Medical Society formally protests any interference with the humane use of animals for experimental purposes.

The Speaker: This resolution will go to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

D. B. Wiley, M.D. [Macomb]: Resolution regarding membership.

Whereas, James E. Curlett, M.D., of Roseville, Michigan, having reached the age of 76, has been a member in good standing of the Michigan State Medical Society for 30 years, and

Whereas, Dr. James E. Curlett has been granted an Honorary Life Membership in the Macomb County Medical Society, and

Whereas, Dr. James E. Curlett has represented the Macomb County Medical Society in the House of Delegates of the Michigan State Medical Society, be it therefore

Resolved, That the Macomb County Medical Society submit the name of James E. Curlett, M.D., to the House of Delegates of the Michigan State Medical Society for Life Membership in the Michigan State Medical Society.

The Speaker: This resolution will go to the Reference Committee on Constitution and By-laws.

VIII—8. SPECIAL MEMBERSHIP

Alvin Thompson (Genessee): I have some resolutions concerning membership.

Whereas, Oscar W. McKenna, M.D., Flint, Michigan, has practiced medicine for fifty years and has maintained membership in good standing for more than twenty-five years, be it

Resolved, That Oscar W. McKenna, M.D., be placed on the Emeritus Membership list of the Michigan State Medical Society.

* * *

Whereas, James A. Baird, M.D., Flint, Michigan, has practiced medicine for fifty years and has maintained membership in good standing for more than twenty-five years, be it

Resolved, That James A. Baird, M.D., be placed on the Emeritus Membership list of the Michigan State Medical Society.

* * *

Whereas, James Houston, M.D., of Swartz Creek, Michigan, has attained the age of seventy years and maintained an active membership in good standing for more than ten years, be it

Resolved, That James Houston, M.D., be placed on the Life Membership roster of the Michigan State Medical Society.

The Speaker: These resolutions will go to the Reference Committee on Amendments to the Constitution and By-laws.

Milton Shaw, M.D. (Ingham): Ingham County Medical Society submits the following nominations for emeritus and life membership in the Michigan State Medical Society. The physicians nominated qualify according to the requirements of the Michigan State Medical Society:

For emeritus membership: C. P. Doyle, M.D., of Lansing, Gertrude O'Sullivan of Mason, and Thomas Sanford, M.D., of Lansing.

For life membership: Frank Dunn, M.D., and Fred Seger, M.D., both of Lansing.

The Speaker: These resolutions will be referred to the Reference Committee on Constitution and By-laws.

VIII—10. SECTION ON UROLOGY

R. S. Breakey, M.D. [Ingham]: Resolution relative to the establishment of a Section on Urology of the Michigan State Medical Society.

Whereas, There have been recognized and approved by the Michigan State Medical Society eight specialty sections with scheduled meetings at the time of the annual meeting of the entire Society; these sections embracing the following specialties: Ophthalmology and Otolaryngology, Dermatology and Syphilology, Radiolgy, Anesthesia and Pathology, Surgery, Pediatrics, Gynecology and Obstetrics, Internal Medicine, and General Practice, and

Whereas, Urology is a specialty separate and distinct from these mentioned, and

Whereas, There has not until the present been established a Section on Urology of the Michigan State Medical Society, and

Whereas, Such a section is active and beneficial to all in the American Medical Association and many other state medical societies, and

Whereas, It has been brought to the attention of the urologists of the Michigan State Medical Society that the American Urological Association urges this proper representation of the urologic field in this state society, and

Whereas, Such a section would be mutually advantageous to both the urologists and the general practitioners; therefore, be it

Resolved, That we respectfully submit for your careful consideration, recognition of the field of urology by the establishment of a section to be known as the Urologic Section of the Michigan State Medical Society.

The Speaker: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

E. A. Oakes, M.D. (Manistee): Mr. Speaker, here are two special memberships to be presented from Manistee County.

Whereas, Harlan MacMullen, M.D., has been an active member of the Manistee County Medical Society in good standing for forty years and is now retired, be it, therefore,

Resolved, That he be elected to retired membership.

* * *

Whereas, Lee A. Lewis, M.D., has been in practice for over fifty years, and is a member in good standing of the Manistee County Medical Society and fulfills all the necessary requirements for Member Emeritus, be it therefore

Resolved, That he be elected to such membership.

The Speaker: The resolutions will be referred to the Committee on Constitution and By-laws.

W. B. Mitchell, M.D. (Kent):

Whereas, The Following members of the Kent County Medical Society, namely: George H. Bauer, M.D., Alexander M. Campbell, M.D., Robert J. Hutchinson, M.D., Reuben Maurits, M.D., Mortimer E. Roberts, M.D., have fulfilled the requirements for eligibility as emeritus members of the Michigan State Medical Society and whose eligibility has been certified by the Secretary of the Michigan State Medical Society, and

Whereas, The following members of the Kent County Medical Society, namely: Elton P. Billings, M.D., Charles W. Brayman, M.D., Jacob D. Brook, M.D., Louis Chamberlain, M.D., William J. DuBois, M.D., John Kremer, M.D., Peter J. Kriekard, M.D., George F. Lamb, M.D., William D. Lyman, M.D., Albert Noordeweir, M.D., and Clyde C. Slemmons, M.D., have fulfilled the requirements for eligibility as Life Members of the Michigan State Medical Society and whose eligibility has been certified by the Secretary of the Michigan State Medical Society. All of the above named men have been recommended for such memberships by a vote of the Kent County Medical Society, therefore, be it

Resolved, That they each be elected to the special memberships designated.

The Speaker: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

* * *

A. H. Miller, M.D. (Delta-Schoolcraft):

Whereas, Dr. Clayton Willison, of Chippewa-Mackinac County, has been in practice more than fifty years and been in the Medical Society for more than twenty-five years, we respectfully petition the House of Delegates that he be made an emeritus member.

The Speaker: This resolution will be referred to the Reference Committee on Constitution and By-Laws.

A. B. Gwinn, M.D. (Barry):

Whereas, Dr. Robert Harkness has reached the age of seventy-one years and has been an active member of the Michigan State Medical Society for more than ten years and

Whereas, Dr. Harkness is retired from active practice, therefore, be it

Resolved, That Dr. Robert Harkness be admitted to life membership in the Michigan State Medical Society.

The Speaker: This will be referred to the Reference Committee on Constitution and By-laws.

VIII—11. CO-OPERATION WITH NURSING AGENCIES TO SOLVE PROBLEMS OF NURSE SHORTAGE

W. B. Cooksey, M.D. (Wayne):

Inasmuch as there exists today a critical lack in graduate nurses in the State of Michigan and throughout the nation;

Inasmuch as the schools of nursing have only one-tenth to one-half the enrollment they should have to meet current needs; and

Inasmuch as this shortage of nursing care may lead to a reduction of existing hospital beds, the supply of which now available does not meet the public demand; and

Inasmuch as the Michigan Council on Community Nursing and all local component councils which have representation from organized medicine, the State Hospital Association, organized nursing, and the public have been given the responsibility of studying this problem and instituting ways and means of overcoming this situation; and

Inasmuch as the Michigan State Nurses Association, in co-operation with the Michigan State Hospital Association, has already

established minimum personnel practices including wages, hours of work, vacations and other matters directly concerned with personnel practices; and

INASMUCH as organized nursing has already developed training programs for subsidiary workers to assist in the care of patients to give the best possible distribution of trained nurses; and

INASMUCH as committees of organized nursing are studying all phases of nursing education to attract young women into this field; therefore,

BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society instruct the Nursing Committee of the Michigan State Medical Society to co-operate with the existing nursing agencies concerned with this problem; and

BE IT FURTHER RESOLVED, That the House of Delegates consider an appropriation to assist in the public relations aspect of this problem.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

R. J. ARMSTRONG, M.D. (Kalamazoo):

WHEREAS, The following members of the Kalamazoo Academy of Medicine have attained the age of seventy years and have maintained active membership in good standing for more than ten years in the Kalamazoo Academy of Medicine, be it therefore

RESOLVED, that they be transferred to the Life Members' Roster of the Michigan State Medical Society: William N. Kenzie, M.D., Roscoe F. Snyder, M.D., Burt D. Walker, M.D., Ray Thomas Fuller, M.D., and Herman A. Rigterink, M.D.

* * *

WHEREAS, the following are honored members of the Kalamazoo Academy of Medicine: William E. Shackleton, M.D., Leslie H. S. DeWitt, M.D., and George H. Caldwell, M.D., and

WHEREAS, They have maintained their membership in the Kalamazoo County Society for a period of more than ten years and have retired from practice, be it therefore

RESOLVED, That, on recommendation of the Kalamazoo Academy of Medicine, they be transferred to the Retired Members' Roster of the Michigan State Medical Society.

THE SPEAKER: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

VIII—12. MEDICAL VETERANS REMISSION OF DUES (MSMS)

Are there further resolutions?

D. C. SOMERS, M.D. (Wayne):

WHEREAS, Returning medical veterans have been faced with innumerable problems and considerable expense in re-establishing their practices; and

WHEREAS, The majority of medical veterans have had their incomes considerably curtailed for the past several years; and

WHEREAS, The medical veterans are anxious to maintain their affiliation with the State Medical Society; therefore, be it

RESOLVED, That the Medical Veterans of World War II express their very sincere appreciation to the Michigan State Medical Society for its remission of dues granted to the Medical Veterans.

THE SPEAKER: This resolution will go to the Reference Committee on Resolutions. Are there further resolutions?

VIII—13. MEMORIAL TO JAMES D. BRUCE, M.D., DECEASED

H. H. RIECKER, M.D. (Washtenaw): The Washtenaw County Society asked me to present the following resolution:

WHEREAS, The House of Delegates of the Michigan State Medical Society regrets the recent death of the late Dr. James D. Bruce, and

WHEREAS, Dr. Bruce was an outstanding practitioner of medicine and surgery in his home town of Saginaw for many years, and

WHEREAS, In his later years, he ably served as a member of The Council of the Michigan State Medical Society for three successive terms, and

WHEREAS, His untiring devotion to the cause of medical education resulted in the placing on a firm footing of the postgraduate medical education program of the Michigan State Medical Society and

WHEREAS, His influence was instrumental in establishing the Children's Clinics at Marquette and Traverse City, therefore,

BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society register its grief and extend its deep sympathy to Mrs. Bruce and family at the loss of such an outstanding member, and express its appreciation of his services to the principles of organized medicine, and

BE IT FURTHER RESOLVED, That a copy of this resolution be spread on the minutes of the House of Delegates and a copy transmitted to Mrs. Bruce.

THE SPEAKER: This resolution will be referred to the Reference Committee on Officers' Reports.

VIII—14. ASSESSMENT ($25) FOR PUBLIC RELATIONS AND PUBLIC EDUCATION

H. H. RIECKER, M.D. (Washtenaw):

WHEREAS, Much progress has been made by the Michigan medical profession in effecting wider distribution of quality medical care; and

WHEREAS, Continued public education is necessary to continue and extend programs which have made for the better health of the people such as we have begun; and

WHEREAS, $10 was appropriated in 1944 and $10 in 1945, and $25 in 1946 for the purposes of public education and all has been allocated except a reserve fund for exigencies; and

WHEREAS, A necessarily comprehensive program has been scientifically prepared and developed to meet the greater problems anticipatd in 1947, and

WHEREAS, In 1947 the need will be more acute because it is a legislative year; and

WHEREAS, The public education-public relations program has shown great progress and will continue to grow, and financial provision must be made in advance to meet the requirements of the contemplated program, therefore, be it

RESOLVED, That a per capita assessment of $25 be levied for the year 1947 for purposes of public education and public relations.

THE SPEAKER: This resolution will be referred to the Reference Committee on Resolutions.

VIII—8. SPECIAL MEMBERSHIPS

LUTHER W. DAY, M.D. (Hillsdale):

WHEREAS, Each of the following members is now over seventy years of age and has been a member of the Hillsdale County Medical Society for more than ten years, the Hillsdale County Medical Society requests the House of Delegates to extend the privileges of life membership in the Michigan State Medical Society to—Harry Clay Miller, M.D., Henry Franklin Hughes, M.D., and Elihu Arthur Martindale, M.D.

THE SPEAKER: These resolutions will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

THE SPEAKER: Is there a further resolution?

If not, we will proceed now with the reports of the standing committees.

IX. Amendments to Constitution & By-Laws

IX—1. RE LIFE MEMBERSHIPS

D. W. THORUP, M.D. (Berrien): Mr. Speaker and Members of the House of Delegates: "Whereas, Article III, Section 8 of the Constitution of the Michigan State Medical Society, re 'Life Members' does not adequately serve the best interests of the Michigan State Medical Society and does not confer upon its members the honor intended; therefore be it

RESOLVED, That Section 8 of Article III, of the Michigan State Medical Society Constitution be deleted."

THE SPEAKER: This resolution will be referred to the Reference Committee on Amendments to the Constitution and By-laws.

X. Reports of Standing Committees

X—1. LEGISLATIVE COMMITTEE

Is there a supplemental report of the Legislative Committee?
If not, it will stand as on page 48 in the Handbook.

X—2. COMMITTEE ON DISTRIBUTION OF MEDICAL CARE

Committee on Distribution of Medical Care. Is there any report?

X—3. ETHICS COMMITTEE

Is there a supplemental report from the Committee on Ethics?
If not, the report will stand.

X—4. MEDICO-LEGAL COMMITTEE

Medico-Legal Committee. Any supplementary report?
If not, it will stand the same as on page 49.

X—5. PREVENTIVE MEDICINE COMMITTEE

Preventive Medicine Committee. Any supplementary report?
If not, it will stand as on page 50.

X—6. CANCER CONTROL COMMITTEE

The Cancer Committee. Any supplementary report?
If not, it will stand as on page 51.
We will ask Dr. DeTar to take the chair.
(J. S. DeTar, Vice Speaker, took the chair.)

X—7. MATERNAL HEALTH COMMITTEE

THE VICE SPEAKER: Is there a supplemental report of the Maternal Health Committee?
If not, it will stand as in the Handbook.

X—8. VENEREAL DISEASE CONTROL COMMITTEE

Is there a supplemental report of the Venereal Disease Control Committee?
If not, it will stand as in the Handbook.

X—9. TUBERCULOSIS CONTROL COMMITTEE

Tuberculosis Control Committee. A supplementary report?
If not, it will stand as recorded.

X—10. INDUSTRIAL HEALTH COMMITTEE

From the Industrial Health Committee?
If not, it will stand as recorded.

X—11. MENTAL HYGIENE COMMITTEE

From the Mental Hygiene Committee, any supplemental report?
If not, it will stand as in the Handbook.

X—12. CHILD WELFARE COMMITTEE

From the Child Welfare Committee, any supplemental report?
If not, it will stand as in the Handbook.

X—13. IODIZED SALT COMMITTEE

From the Iodized Salt Committee?
If not, it will stand as in the Handbook.

X—14. HEART AND DEGENERATIVE DISEASES COMMITTEE

From the Heart and Degenerative Diseases Committee. Any supplemental report?
If not, it will stand.

X—15. COMMITTEE ON POST-GRADUATE MEDICAL EDUCATION

From the Committee on Postgraduate Medical Education. Any supplemental report?
If not, it will stand.

X—16. COMMITTEE ON PUBLIC RELATIONS

From the Committee on Public Relations. If there is no supplemental report, it will stand.

May I call your attention to the fact that there is a report in the Handbook from the Public Relations Committee and the supplemental report takes the form of the brochure which you received through the mail, copies of which you may get at the back of the room.

XI. Reports of Special Committees

The next item on the agenda is the reports of Special Committees. I am going to ask that you all remain for one very important report, which is down at the bottom of the page, which will take just a few minutes.

XI—1. COMMITTEE ON NURSES' TRAINING SCHOOLS

Is there a report from the Committee on Nurses' Training Schools?
If not, it will stand as on page 73.

XI—2. CONFERENCE COMMITTEE ON PRELICENSURE MEDICAL EDUCATION

Any supplemental report of the Conference Committee on Prelicensure Medical Education?
If not, it will stand as reported.

XI—3. SCIENTIFIC RADIO COMMITTEE

Is there a report from the Scientific Radio Committee?
If not, it will stand.

XI—4. ADVISORY COMMITTEE TO WOMAN'S AUXILIARY

Is there a report from the Advisory Committee to the Woman's Auxiliary?
If not, it will stand as reported.
Is there a supplemental report from the Scientific Work Committee?
If not, the report will stand.

XI—5. PROFESSIONAL LIAISON COMMITTEE

Is there a report from the Professional Liaison Committee?
If not, the report will stand.

XI—6. COMMITTEE ON BEAUMONT MEMORIAL

Does the Committee on Beaumont Memorial have a supplemental report?
If not, the report will stand.

XI—7. MICHIGAN FOUNDATION FOR MEDICAL AND HEALTH EDUCATION

Does the Committee on the Michigan Foundation have a report?
If not, it will stand as on page 74.

XI—8. JOINT COMMITTEE WITH STATE BAR OF MICHIGAN

Does the Joint Committee with the State Bar of Michigan have a report?
If not, it will stand as in the Handbook.

XI—9. SPECIAL COMMITTEE ON RADIO

Does the Special Committee on Radio have a report?
If not, it will stand.

XI—10. POSTWAR EDUCATION COMMITTEE

Does the Postwar Education Committee have a report?
If not, it will stand as recorded.

XI—11. CONTACT COMMITTEE WITH ASSOCIATION OF WELFARE BOARDS AND BOARDS OF SUPERVISORS

Does the Contact Committee with Association of Welfare Boards and Boards of Supervisors have a report?

XI—12. RHEUMATIC FEVER CONTROL COMMITTEE

I shall call upon Dr. Herman Riecker to give a report on the Rheumatic Fever Control Committee. Dr. Herman Riecker of Washtenaw.

The Committee on Rheumatic Fever Control of the Michigan State Medical Society was established by The Council of the Michigan State Medical Society in 1945 at the suggestion of the Preventive Medicine Committee in order to bring to the attention of the physicians of the state the problems of the control of rheumatic fever and to develop methods for their solution.

During the past year the Committee has formulated the following objectives:

First: To organize a readily available consultation service for the physicians of the state to which any child or adult, regardless of economic status, can be referred for determination of the presence of the disease and advice as to its management.

Second: To assist in finding rheumatic fever cases and placing them under competent medical care, by educational measures directed both to physicians and patients.

Third: To conduct a follow-up program by which all cases of rheumatic fever in Michigan can be adequately cared for, in both a social and medical sense.

Fourth: To develop and preserve statistical data from which progress can be measured.

It was the opinion of The Council that rheumatic fever is more prevalent in the state than has been generally recognized. It was known that the disease causes more crippling of children than all other childhood diseases combined. The results of the Selective Service examinations further substantiated the opinion of The Council that rheumatic fever is a prevalent disease and should be given a more prominent place in preventive medical efforts of the Society.

It was understood by the Committee and The Council that the disease cannot be recognized and controlled by standard public health measures alone; that the family physician must be alerted and trained to suspect the disease and to assume responsibility for its control on a family level as well as the community and state level.

The Preventive Medicine Committee had made rheumatic fever a reportable disease some years before, and had suggested to the Michigan Crippled Children Commission that the rheumatic fever child is a "crippled child." This concept of the rheumatic fever child is not unique in Michigan and was readily accepted by the Commission which is undertaking to finance all those victims of the disease who are in the borderline economic brackets, or indigent.

The first meeting of the present year was held on September 6, 1945, at which time nine consultation and diagnostic centers were organized in the state. The Rheumatic Fever Committee decided that the services of the consultation groups in the various centers would be limited to consultation and diagnosis; that all children must be referred by their family physician, and the reports including suggestions for management made di-

rectly to him; that facilities be available for the control of sulfonamide prophylaxis; that all cases diagnosed as rheumatic fever should be reported to the Michigan Department of Health; that siblings of each proven case be examined; that accurate records on uniform blanks, including follow-up records, should be kept by each center; and that an economic borderline or indigent case must be referred by the family physician through the Probate Court for financial support by the Michigan Crippled Children Commission.

A letter has been sent to all doctors of medicine in the areas of the local centers, notifying them of the creation of the diagnostic and consultation centers.

The following consultation centers have been established and are now in operation: Ann Arbor, Bay City, Flint, Grand Rapids, Jackson, Kalamazoo, Lansing, Marquette, and Traverse City. At this point a tribute is due Dr. Moses Cooperstock for his initiative, judgment, and enthusiasm in establishing a model clinic in the Upper Peninsula at Marquette.

In order to stimulate interest and arouse a sense of alertness regarding rheumatic fever, the Committee decided to hold a "rheumatic fever conference" in Detroit at which time members of the Society interested in the disease would be invited. This conference was held September 19 and 20, 1945. Three nationally known authorities on the disease were invited to lead the discussions and more than 300 physicians registered for the conference. This conference was supported most heartily by the Detroit hospitals, including arrangements for teaching rounds, and participated in by the staffs of Wayne University College of Medicine and the University of Michigan Medical School. Similar teaching conferences are planned by the Committee for the future.

Through its chairman, Dr. L. Fernald Foster, the Committee was able to obtain from the Michigan Society for Crippled Children and Disabled Adults, by the special efforts of Mr. Percy Angove, a sum of money sufficient to finance the expenses of the nine diagnostic centers. To Mr. Angove and the Society for Crippled Children and Disabled Adults the Committee is sincerely grateful for the $15,000 appropriated to carry on this work.

This gift enabled the Committee to activate all nine centers for diagnosis and consultation. The individual centers have been manned by *physicians* especially interested and well-qualified in this particular field. Their earnest and unselfish efforts are to be heartily commended.

The Committee has been called together five times during the current year to hear reports from individual center chairmen, to discuss problems of each center, and to stimulate further interest in the disease among physicians. At one meeting H. Earle Correvont, Chief of the Rehabilitation Division of the State, explained to the Committee the possible participation of the Division in the program with especial reference to the rehabilitation of children who have recovered from the disease. Needless to say, other cities than those mentioned above have requested the formation of diagnostic groups. These requests are being considered by the Committee.

During the early developmental period of this work it was understood by the Committee that Wayne County already had six consultation centers in operation. Having recently learned that this was a misunderstanding, the secretary of this Committee asked Dr. W. B. Harm, President of the Wayne County Medical Society, to attend a committee meeting. Dr. Harm readily agreed to undertake the formation of consultation groups in Wayne County of the type now in operation in outstate communities. Should Wayne County become organized as part of the State plan, a rheumatic fever control program will have been developed in Michigan that might well serve as a model for other state medical societies to emulate.

In counties where public health nursing facilities are available physicians may utilize such ancillary services to assist in the followup of individual cases. This will be true particularly for indigent children and those who are borderline economically.

During the coming year the Committee expects to continue its educational activities to physicians and laymen. The Committee members and others have been engaged already for numerous talks before lay organizations in order to stimulate a better lay knowledge of the high incidence of the disease and its crippling effects upon the children in Michigan.

In approximately one year of activity, the Committee has noted a marked increase in the recognition of the disease and a definite increase in the number of admissions of rheumatic fever cases to hospitals, including the University Hospital, thus substantiating The Council's decision to undertake this program for the control of the disease. The Council believes that this special interest and effort will be rewarded by a higher quality of medical service to the communities of the state and serve also as a pattern for such organizations in other states.

A preliminary report of six of the nine centers follows, three of the centers not having been able to report: An accurate count of the number of active cases cannot be given but it is estimated that there are between 400 and 500 cases in the state.

1. Number of cases referred to the consultation groups this year: 107.
2. Number of cases diagnosed as rheumatic fever: 55.
3. Number of cases definitely not active rheumatic fever: 52.
4. Number of indigent cases seen: 22.
5. Number of Counties from which cases were referred: 23.
6. Cost of operation of centers to date: $2,604.34.

Much of the year's cost is for permanent fixtures and is nonrecurrent.

It has been thought that rheumatic fever cannot be controlled on a State level.* However, the Committee believes that the only method of adequately controlling this scourge of childhood must be carried out by the combined efforts of individual physicians, supplemented by the Michigan Crippled Children Commission, the Michigan Society for Crippled Children and Disabled Adults, and the Rehabilitation Division of the State, as well as the ancillary services and laboratory facilities of the counties and hospitals of the state.

The Michigan program for the care of the rheumatic fever child is a challenge to the medical profession and the citizens of Michigan, to *solve* adequately a widespread health problem on the *state level,* rather than to pass responsibility to the Federal Government. A strong organization has been built by your Committee in the various communities of the state, the progress in recognition and control of the disease is definitely encouraging, and the Committee recommends that every officer, delegate, and member of the Michigan State Medical Society give this program his wholehearted interest and support.

Respectfully submitted,

L. Fernald Foster, M.D., Chairman
Carleton Dean, M.D.
H. H. Riecker, M.D.
Frank Van Schoick, M.D.
Mr. Percy Angove

(The Speaker, Dr. Ledwidge, resumed the chair.)

The Speaker: This report will be referred to the Reference Committee on Special Committees.

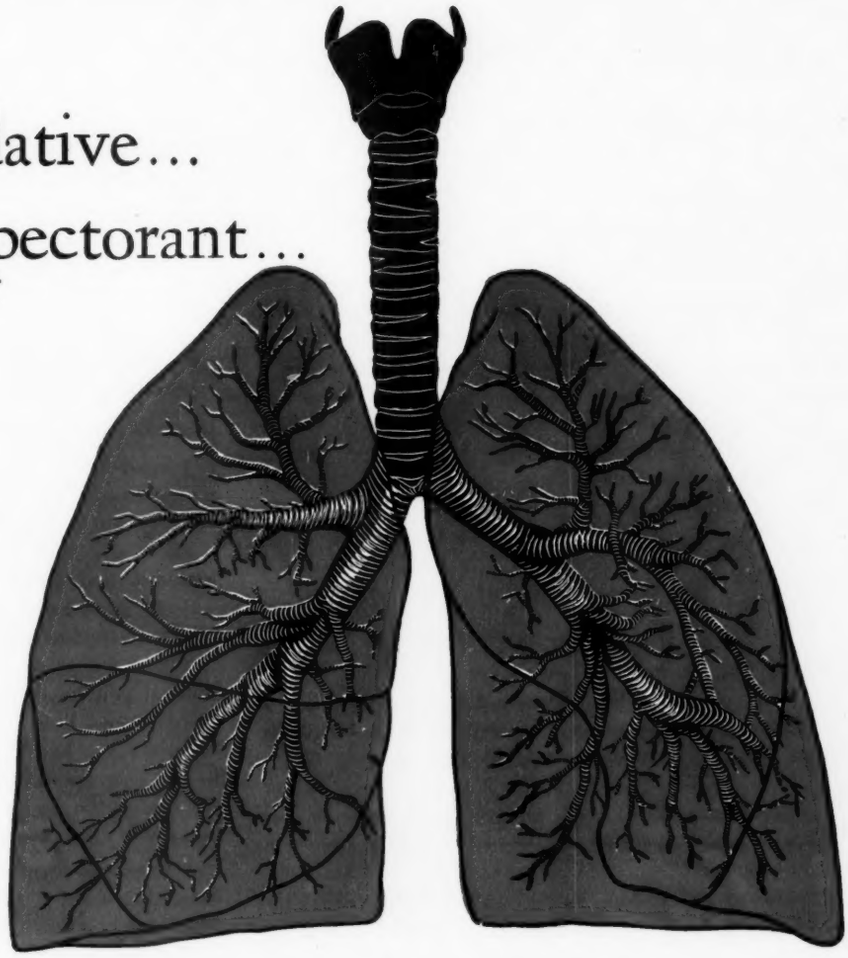
That completes our work for the night.

(The House recessed at eleven-thirty o'clock.)

*T. Duckett Jones, M.D., Assistant Professor of Medicine, Harvard University, before the Murray Committee, U. S. Senate.

(To be concluded in January issue)

bronchial sedative...
bronchial expectorant...



The combined expectorant-sedative action of Lobidine (Searle) leads to amelioration of cough and irritative symptoms accompanying and following upper respiratory infections.

Lobidine
(SEARLE)

Lobidine is the registered trademark of G. D. Searle & Co., Chicago 80, Illinois.

SEARLE RESEARCH IN THE SERVICE OF MEDICINE

Communications

Marriage of Second Cousins

Oct. 22, 1946

Dear Dr. Haughey:

A young couple have requested this information, if possible from a medical book or from quotation of authority:

May second cousins marry legally? What is the medical opinion at this time, as to mental hazards to the offspring of such marriage? What is the same opinion as to physical hazards?

As I recall, it is legal, at least in some states, and no hazards exist except accentuation of inherent characteristics of both parents.

Any information will be appreciated.

Sincerely yours,
C. D. KLAUS

* * *

October 28, 1946

Dear Dr. Haughey:

Re: Letter from Dr. Klaus

Michigan laws recognize as legal the marriage between second cousins. The marriage of first cousins is not legal.

Attempts have been made to predict the mental and physical characteristics of humans according to the Mendelian law.

Clinical evidence does not support the Mendelian law regarding mental diseases. It is noted clinically that the incident of manic depressive psychosis is greater in offsprings who have histories of manic depressive episodes in both parents or their siblings. Regarding epilepsy, it is noted clinically that the child of parents who both have abnormal EEG's is quite liable to be an epileptic of some type. On the other hand, where one parent has a normal EEG and the other is abnormal, the chances of their having an epileptic child are about one in forty, according to Dr. Lennox of Boston, a recognized authority on epilepsy.

Dr. Charles A. Myerson, as chairman of a committee of the American Neurological Association, reported on inherited neurological conditions that, except in certain rare neurological diseases such as amurotic familiar idiocy, the inheritance was unpredictable with any degree of certainty. Dr. A. P. Noyes, in his 2nd Edition "Modern Clinical Psychiatry," states: "Except in rare forms of mental disease, such as Huntington's chorea, there is no conclusive evidence that hereditary transmission follows Mendelian ratios. Our knowledge of hereditary predisposition to mental disease, as in the case of many other problems concerning heredity, is incomplete, and our opinions must remain subject to revision."

The application of the Mendelian law regarding physical conditions such as hemophilia and color blindness and the color of the eyes is not so simple as it sounds. It must be born in mind that the Mendelian law was arrived at through a study of the lower forms of life. The physical and mental characteristics of offsprings of the marriage of second cousins are not predictable with any degree of certainty.

Sincerely,
HENRY A. LUCE
Chairman, Committee
on Mental Hygiene

Tonsillectomy and Poliomyelitis

October 22, 1946

Dear Doctor Haughey:

I read with interest your editorials on poliomyelitis in the September, 1946, JOURNAL of the Michigan State Medical Society. I was not particularly pleased with the tenor of the editorials because there are data which are arresting and thought provoking in this matter; and in general, good health departments do not issue an edict or give information unless they have a basis for it.

I noted also on page 1148 at the front of the same journal you have included a press release in which Dr. Douglas and I are quoted on tonsillectomy. Oftentimes, reporters do badly when writing on medical subjects; in this case the information was rather well done. But I am taking the liberty of enclosing, nearly *in toto,* a letter in answer to a query from a nose and throat specialist.

I would like your reaction to the data presented and also ask you what you would suggest to lay people when questioned concerning the advisability of tonsillectomy during the poliomyelitis season on the basis of the data presented? Please understand that these studies are still going on; that we do not wish to be dogmatic in the least, but as an answer must be given to the public, it is reasonable to emphasize at the present time at least the undesirability of an elective procedure like tonsillectomy during months when poliomyelitis is prevalent.

Sincerely yours,
FRANKLIN H. TOP, M.D.
Medical Director
Herman Kiefer Hospital

* * *

July 20, 1946

Dear Doctor.....:

Dr. Douglas requested me to reply to your letter addressed to him.

I shall include data for the outbreaks of 1939 and 1944, and also the tonsillectomy data on hospital patients for 1945. The 1939 and 1944 data are for city cases only. The 1939 data in the table below are given showing cases, deaths and controls by tonsillectomy status; this is self-explanatory. The case controls were strictly chosen and match the cases. The Special District, West Side, and Children's Institutional controls were in addition to the regular because of odd circumstances sur-

(Continued on Page 1658)

BETTER BABY FEEDING

with

Campbell's STRAINED BABY SOUPS

Q. Will Baby like these soups?

A. If he is like most babies, he will. Mothers who have tried Campbell's Strained Baby Soups say that they are better-tasting—that Baby takes them readily and appears to enjoy their tempting, normal flavors. Each soup retains to the utmost the natural flavors of the meats and vegetables employed. The texture is smooth and the consistency uniform and pleasing to the infant.

Q. Why five kinds?

A. Doctors agree that it's important to get Baby accustomed to a variety of flavors early in life, so that he will accept all foods readily and will not develop "fussy" eating habits. Also, it takes many different foods to supply the approximately 40 nutrients needed for infant development and energy—hence we use vegetables and a cereal in the preparation of each one of our four meat soups.

Q. What about vitamin and mineral retention?

A. The latest scientific information has been drawn upon in developing a cooking method which insures the efficient conservation of vitamins and the retention of minerals. A comprehensive analysis of each soup may be had upon application to Campbell Soup Company, Camden, N. J.

5 KINDS:

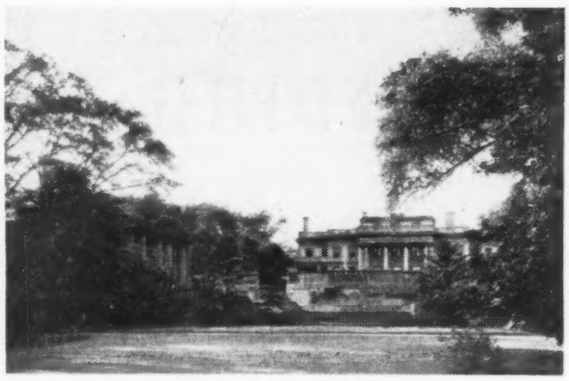
CHICKEN
BEEF
LAMB
LIVER
VEGETABLE

All in Glass Jars

Campbell's Strained Baby Soups represent fine quality . . . in ingredients . . . in care and method of cooking . . . in retention of minerals and conservation of vitamins . . . *and in good flavor.* Every resource of Campbell's Kitchens is devoted to that aim.

LOOK FOR THE RED-AND-WHITE LABEL

Detroit Medical Hospital



7850 East Jefferson Avenue

A private hospital devoted to the diagnosis and treatment of mental and nervous illness, alcoholics and drug addicts. All accepted psychiatric and mental therapies.

Beautiful grounds facing the Detroit River

Registered by the American Medical Association

Licensed by the Michigan State Hospital Commission

DETROIT MEDICAL HOSPITAL

FITZROY 7100

7850 E. JEFFERSON AVE.

DETROIT 14 MICHIGAN

Tonsillectomy and Poliomyelitis

(Continued from Page 1656)

rounding each district, but you will note that only in the Children's Institutional controls was the rate of tonsillectomy among them fairly high. This is probably the result of the community, which is very largely made up of middle-class Jewish population, whereas the West Side controls and Special District controls were in Polish areas.

Poliomyelitis in Detroit, 1939
Cases, Deaths and Controls by Tonsillectomy Status

		No Tonsillectomy		Tonsillectomy	
	Total	Number	Per cent	Number	Per cent
All cases	521	306	58.7	215	41.3
Deaths	23	3	(13.0)	20	87.0
Case controls*	497	364	73.2	133	26.7
Spec. Dist. controls	129	113	87.6	16	12.5
West Side controls	167	138	82.6	29	17.4
Child. inst. controls	141	89	63.1	52	36.9

The data for this particular outbreak are the most reliable because controls are included, and one gets a fair idea of the rate of tonsillectomy not only among the ill but also among controls, and tonsillectomy here relates to any time during life and not just for a short period prior to the illness. Data on the occurrence of the procedure within thirty days of illness is as follows: Among 521 cases 5.1%; among 21 deaths, 5.0% among 497 controls, 7.5%. Thus, tonsillectomy within thirty days of illness in the patient was lower than the chosen control. In other words, from these data it would not appear that tonsillectomy *per se* predisposes to poliomyelitis. Of course, the virus must be present in order for the disease to occur at all, but we must admit during this epidemic period that it probably was, at least for argument's sake. Our data, as you will note from successive material presented here, would indicate that in general recent tonsillectomy does not necessarily predispose to poliomyelitis, but there is a very definite indication that it does result when poliomyelitis occurs in a more severe form of the disease, namely, in the bulbar or bulbo-spinal types, and this is not only true of recent tonsillectomy but apparently can be stated for tonsillectomy at any time. Thus, among the non-tonsillectomized in 1939 only 4.2% developed the bulbar type, whereas 27% of patients tonsillectomized at any time during life developed the bulbar form.

Poliomyelitis in Detroit, 1944
Cases and Deaths by Tonsillectomy Status

		No Tonsillectomy		Tonsillectomy	
	Total	Number	Per cent	Number	Per cent
All cases	343	119	34.7	224	65.3
Deaths	16	3	(18.75)	13	81.25

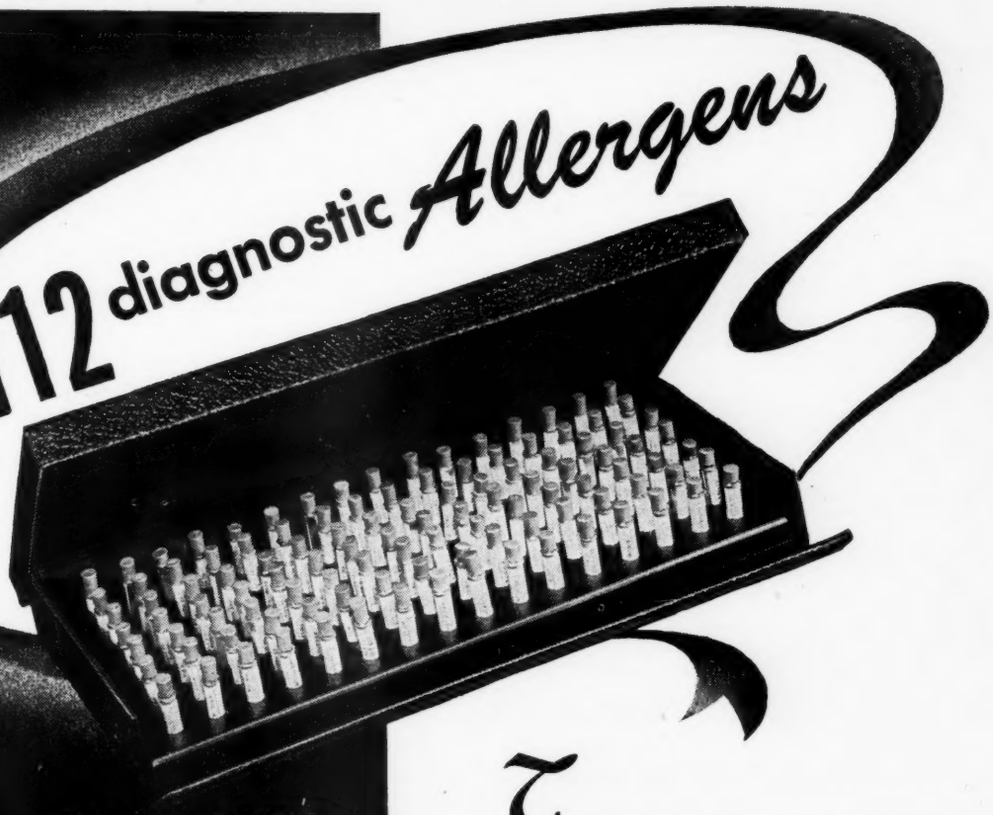
In 1944 there were no controls so that the tonsillectomy history rate for normal children at various ages

(Continued on Page 1660)

*Only first contact mentioned by parent of case included in this category.

Say you saw it in the Journal of the Michigan State Medical Society

112 diagnostic Allergens



FOOD ALLERGENS

Almond
Apple
Apricot
Asparagus
Banana
Barley
Bean
Beef
Beet
Brazil Nut
Broccoli
Buckwheat
Cabbage
Cantaloupe
Carrot
Cauliflower
Celery
Cheese, American
Cheese, Swiss
Cherry
Chicken
Clam, Hard
Cocoa
Cocoanut
Codfish
Coffee
Corn
Crab
Cucumber
Duck
Eggwhite
Eggyolk
Flounder
Gelatin
Ginger
Grape (Raisin)
Grapefruit
Halibut
Herring
Honeydew
Lactalbumin
Lamb
Lettuce
Lima Bean
Lobster
Mackerel
Milk (Cow)
Mushroom
Mustard
Oat
Onion
Orange
Oyster
Pea
Peanut
Pecan
Pepper (Red, Green)
Perch
Pike
Pineapple
Pork
Potato
Prune (Plum)
Pumpkin
Quince Seed
Radish
Rice
Rye
Salmon
Sardine
Scallop
Shrimp
Soy Bean
Spinach
Strawberry
Sweet Potato
Tomato
Tuna Fish
Veal
Walnut (English)
Wheat
Whitefish (Lake)
Yeast

INCIDENTAL ALLERGENS

Cotton Seed
Dust
Flaxseed
Glue
Gum Karaya
Kapok
Orris Root
Pyrethrum
Silk
Tobacco

EPIDERMAL ALLERGENS

Cat Hair
Cattle Hair
Dog Hair
Goat Hair
Feathers, mixed
Hog Hair
Horse Dander
Rabbit Hair
Sheep Wool

FUNGUS ALLERGENS

Alternaria sp.
Aspergillus fumigatus
Chaetomium sp.
Cladosporium
Epidermophyton inguinale
Hormodendron
Monilia sitophila
Mucor plumbeus
Penicillium digitatum
Trichophyton interdigitale

Arlington

THERE is increasing evidence that, in asthma, gastrointestinal allergies, infantile eczema, migraine, etc., treatment of allergic sensitivities is yielding gratifying results.

To facilitate diagnosis, Arlington offers a specially prepared assortment of 112 diagnostic allergens representing the most commonly reported causative factors . . . foods, epidermals, fungi and incidentals. Each vial contains sufficient material for at least 30 tests. Full instructions for the simple scratch-test technique and a supply of N/20 NaOH are included.

These dry allergens remain active indefinitely at room temperature. The allergens listed represent the standard Arlington selection. If preferred you may make your own selection of 112 allergens from our current list, available upon request.

$35.00 ALLERGY DIAGNOSTIC SET

Biological Division

THE ARLINGTON CHEMICAL COMPANY

YONKERS 1 **NEW YORK**

Q. What is the Cardiotron

A. It is an instantaneous direct recording Cardiograph, making accurate standard records on permanent graph paper thus eliminating all photographic processes. It operates on 110 Volt A.C. or D.C. current without any batteries. It is light, compact and portable.

Available Through

TEMPLE 1-4055

Wm. R. Niedelson

1214 MACCABEES BLDG.
DETROIT 2, MICHIGAN

MICHIGAN DISTRIBUTOR FOR
Jones Metabolism Equipment Co.
★
Electro-Physical Laboratories, Inc.

Tonsillectomy and Poliomyelitis

(Continued from Page 1658)

is not known, but from the above table, the proportion of ill patients tonsillectomized is readily noted. With relation to the severe forms of poliomyelitis, data show that the bulbar type was 13.8% of the total number of cases, but 89.4% had a history of previous tonsillectomy (at any time), and for the spinobulbar group, which was 14.1% of the total cases, 91.7% gave a history of tonsillectomy. With reference to recent tonsillectomy, 13 of the 343 cases developed poliomyelitis within six weeks of the tonsillectomy procedure. Of this group nine had the bulbar or spinobulbar type of the disease.

1945 data, hospital cases only. During the year there were 36 patients, 19 of whom gave a history of tonsillectomy at some time during life. Only one of these had had a tonsillectomy shortly before the onset of illness. In this instance, the tonsillectomy occurred in May, 1945, and the patient first became ill on July 17, 1945. This boy developed the spinal type of the disease.

Poliomyelitis, Herman Kiefer Hospital, 1945
Cases and Deaths by Tonsillectomy Status

		No Tonsillectomy		Tonsillectomy	
	Total	Number	Per cent	Number	Per cent
All Cases	36	17	47.2	19	52.8
Deaths	3	—	—	3	(100.0)

Cases, Deaths, and Fatality Rate by Clinical Type

		No Tonsillectomy			Tonsillectomy		
Type	Total	C	D	Fat. %	C	D	Fat. %
Nonparalytic	16	12	—	—	4	—	—
Spinal	9	5	—	—	4	—	—
Bulbar	6	—	—	—	6	1	(16.7)
Spinobulbar	5	—	—	—	5	2	(40.0)

Again, it will be noted that the bulbar and spinobulbar types occurred principally in persons who had had tonsils removed. In fact, for this *small* experience, all the bulbar and all the spinobulbar cases occurred among the tonsillectomized; all the deaths (three) occurred in this group.

I think it is fair to say, from our data at least, that there is some relationship between previous tonsillectomy and the occurrence of severe forms of poliomyelitis. I can give no adequate explanation for this. I merely state the facts. Whether this would apply to other communities as well I cannot say, because few authors have attacked the problem from this angle. In general, they have studied the occurrence of poliomyelitis in persons recently tonsillectomized. Aycock gives a very complete experience through 1941 in his article entitled "Tonsillectomy and Poliomyelitis; Epidemiologic Considerations,"—Aycock, W. L., Medicine 21:65 (Feb., 1942). This is actually a monograph on the subject.

I note that you desire this information for a questionnaire, and as you probably know, questionnaires are notoriously poor methods of obtaining information on which exact judgment can be passed. A good example of this is Page's article, "Tonsillectomy and Poliomyelitis;

(Continued on Page 1662)

Say you saw it in the Journal of the Michigan State Medical Society

The UPG 20

PROFESSIONAL MEN'S PROGRAM

Available to All Eligible Members of

MICHIGAN MEDICAL PROFESSION

MICHIGAN LEGAL PROFESSION

MICHIGAN DENTAL PROFESSION

MUTUAL BENEFIT HEALTH AND ACCIDENT ASSOCIATION OMAHA

Lifetime Benefits

Non-Cancellable and Guaranteed Renewable Features

- Pays benefits for both sickness and accidents.
- Carries full waiver of premium for total permanent disability.
- Policy pays disability benefits regardless of whether disability is immediate.
- Policy does not automatically terminate at any age.
- Monthly benefits, $400.00; double indemnity, $800.00.
- Additional benefits, $200.00 per month while in hospital.
- Additional Benefits, $200.00 per month for nurses care at home.
- Accident death benefits, $10,000.00; double indemnity, $20,000.00.
- Mutual Benefit and United Benefit licensed in every state in the U.S.A.

UNITED BENEFIT LIFE INSURANCE COMPANY OMAHA

Address:
Professional
Group Dept.
Room 1142
Book Bldg.
Detroit, Mich.

Notice: This Special Program available only through Professional Group Department Representatives. Authorized registrars will carry a letter of identification signed by J. H. Coker, State Manager, Professional Group Dept.

FEATHERWEIGHT FELTS

Styled exclusively for Whaling's! Fine quality fur felt with raw or bound edge. In four smart new color selections, . . . casual, yet unmistakably distinctive » » » » » » » » » 10.

WHALING'S
MEN'S WEAR · 617 WOODWARD
DETROIT 26 • MICHIGAN

Tonsillectomy and Poliomyelitis

(Continued from Page 1660)

One Case of Poliomyelitis Following 8,915 Tonsillectomies,"—Arch. Otolaryng., 39:232 (Apr., 1944). Page sent out 27,849 questionnaires to parents of children who had been tonsillectomized at the Manhattan Eye, Ear, Nose and Throat Hospital during the years 1937, 1939, and 1941; 8,915 of these questionnaires were returned—approximately one-third of those sent. He states that among the replies obtained only *seven* infections occurred following tonsillectomy. These seven relate to any type of infection, for the question asked was this: *Have you had any illness since tonsillectomy?* If you are interested, in the article are given the number of questionnaires sent and received by year; but I call your attention to the astounding fact of only *seven* illnesses among essentially 9,000 replies! He must have questioned people living in Utopia, for certainly children at tonsillectomy age would be getting, over a period of four years, measles, chickenpox, whooping cough, and other childhood diseases, without even counting such things as influenza, sore throat, scarlet fever, et cetera. In other words, the questionnaire method, at least in this instance, was worthless. Additional papers which you may like to read are those of the following investigators:

Helms, K.: M. J. Australia, 1:467, (April, 1941).

Toomey & Krill: Ohio State M. J., 39:653, (July, 1942).

Fisher, Stillerman & Marks: Am. J. Dis. Child., 61: 305, (Feb. 1941).

Lucchesi & LaBoccetta: Am. J. Dis. Child., 68:1, (July, 1944).

The above studies are not carried out on a control basis, but all through these runs this obvious fact, that a preponderance of the bulbospinal cases have either recently been tonsillectomized or have been tonsillectomized some time in their lives, and that the rate obtained in these severe clinical types is far and away higher by two or three times the rate obtained among normal, well children in a given community. With this body of facts I think it is resonable to advise that tonsillectomy not be done during the poliomyelitis season, but because there is evidence that it predisposes to the occurrence of poliomyelitis (at least in our experience), but that when it occurs among persons recently tonsillectomized the severe clinical types are likely to result; and further in our experience (not studied extensively by others) it would appear that tonsillectomy at any time has a bearing on the clinical type, the reason for which I cannot give. However, the numbers involved would lead me to believe that it is a steady occurrence since 1939; at least it is more than a mere happenstance or caused by chance.

I shall be happy to discuss these findings with you further at any time.

Sincerely yours,

FRANKLIN H. TOP, M.D., Director,
Epidemiology and Communicable Diseases,
Detroit Department of Health.

(Continued on Page 1664)

Dependable Nourishment

DURING THAT *all-important* FIRST YEAR OF LIFE

The well nourished baby is more resistant to the common ills of infancy. Moreover it is during that all-important first year of life that the very foundation of *future* health and ruggedness is laid. Similac-fed infants are notably well nourished; for Similac provides breast milk proportions of fat, protein, carbohydrate and minerals, in forms that are physically and metabolically suited to the infant's requirements. Similac dependably nourishes the bottle fed infant *— from birth until weaning.*

ACCEPTED AMERICAN MEDICAL ASSN. Council on Foods

A powdered, modified milk product especially prepared for infant feeding, made from tuberculin tested cow's milk (casein modified) from which part of the butter fat is removed and to which has been added lactose, olive oil, cocoanut oil, corn oil and fish liver oil concentrate.

SIMILAC } SIMILAR TO HUMAN MILK

M&R DIETETIC LABORATORIES, INC. • COLUMBUS 16, OHIO

Tonsillectomy and Poliomyelitis

(Continued from Page 1662)

October 23, 1946

Dear Sirs: Your question as to tonsillectomies causing polio—Have had none of that kind, but in 1945 circumcision on a five-year-old boy. He had a permanent polio paralysis in one leg within one week. Do not know if operation had any influence on this youngster. For your information and statistical record.

L. E. HART, M.D. (Pediatrician)

Furnishing and Filling Out Prescriptions For Eligible Veterans

General.—This information is published as a guide to all concerned and to be used as a standard procedure in furnishing drugs to eligible veterans through the pharmacies in the State of Michigan as contracted by the Veterans Administration with the Michigan State Pharmaceutical Association at no cost to the veteran. The procedure herein outlined will be followed at all times unless orders to the contrary are received.

Procedure.—1. When a veteran is treated by a physician who has been authorized by the Veterans Administration to tender such treatment and wishes to prescribe medication to the veteran, he will do so by writing out the prescription on one of his regular printed blanks. The prescription, which the authorized physician issues to the veteran, will contain the following information:

(a) Name of Veteran
(b) Address of Veteran
(c) Date of Prescription
(d) Statement of physician as follows: "I am authorized to treat and prescribe for the above-named Veterans Administration patient." The physician's statement of authorization may be written, typed or stamped on either side of the prescription blank.
(e) Signature of the Physician.

2. The veteran can then take this prescription to any participating pharmacy of the State of Michigan Pharmaceutical Association and have it filled at no cost to himself, *providing that he has the prescription filled within ten days after issuance.* The veteran will upon receipt of his medication from the pharmacist sign the following statement on the prescription. "I acknowledge receipt of Prescription No. —— on Date ————.

3. The above procedure is effective only for prescriptions filled out after issuance of July 23, 1946.

(Signed) GUY F. PALMER

Miscellaneous

Dear Doctor Haughey:

In the September issue of THE JOURNAL of the Michigan State Medical Society, I noted on page 1244 in the section devoted to activities of the Michigan Depart-

(Continued on Page 1682)

SCIENTIFICALLY DESIGNED
Braces and Surgical Supports
ARTIFICIAL LIMBS • TRUSSES • ARCH SUPPORTS

By Prescription Only

A quarter century of experience qualifies us to design and fit orthopedic and surgical appliances correctly and scientifically. Satisfaction assured to you and your patients.

Brenner and Keffer COMPANY

4453 WOODWARD AVENUE, DETROIT 1, MICHIGAN

CONVENTION HALL BLDG. • TELEPHONE TEMPLE 1-7917

Say you saw it in the Journal of the Michigan State Medical Society

A Private Hospital

For the Treatment
of the Nervous
and Emotionally Ill.

Exclusively for Rest
and
Electric Shock Therapy

Restful Six-acre Estate Overlooking the Kalamazoo River.

Del Vista Sanitarium, Inc.

403 N. MAIN - U. S. HIGHWAY 131 - PLAINWELL, MICHIGAN

TELEPHONE 2841
DONN C. BENNETT, Manager

Licensed by Michigan Department of Mental Health

FOR MEN WITH TRUE SPORTING INSTINCT

Sportsmen welcome the opening of our new Sports Shop  because they've learned to associate us with only the newest and best in **other** merchandise for men. In this new and separate  department there is equipment and accessories as close to a sportsman's heart as his pipe and tobacco . . . manned by personnel who **know** sports. Our sports shop is already the meeting  place of men who believe that ownership of a good fly rod  or a fine shotgun is one of life's real pleasures.

We Invite You to Visit Us, Soon, and Look Around!

KILGORE and HURD

1259 WASHINGTON BLVD. IN THE BOOK TOWER

Michigan's Department of Health

Wm. De Kleine, M.D., Commissioner, Lansing, Michigan

NEWS OF PERSONNEL

M. T. Johnson, M.D., M.P.H., was appointed director of the Delta County Health Department effective October 1, 1946. Dr. Johnson was formerly director of District Health Service No. 5 of the Iowa State Department of Health at Fort Dodge, Iowa.

* * *

Henry C. Huntley, M.D., formerly director of the Ottawa County Health Department at Miami, Oklahoma, has been appointed director of the Lenawee County Health Department. Headquarters of the new Department are at 119 W. Church Street, Adrian.

* * *

Upon request of the Irish Free State, G. D. Cummings, M.D., director of the Michigan Department of Health's Bureau of Laboratories, left November 12 for Dublin to study epidemic diarrhea of the newborn.

Dr. Cummings has been directing such studies in Michigan for five years. For his Ireland study, specimens were flown to the Michigan Department of Health Laboratories for testing.

Dr. Cummings' trip was financed by the W. K. Kellogg Foundation.

Editor's Note: The *British Medical Journal* for several issues has been commenting on the unsolved epidemic of infantile diarrhea.

INCIDENCE OF POLIOMYELITIS

In the previous epidemic years poliomyelitis has dropped sharply after September. The 1946 variation from this trend may be seen in the following figures of reported cases in Michigan by month.

	Jan.	Feb.	Mch.	Apr.	May	June	July	Aug.	Sept.	Oct.
1946	5	1	2	2	1	4	73	322	282	227
1944	0	0	0	1	0	5	79	327	318	97

MARRIAGES TOP RECORD

Marriages in Michigan will break all records in 1946 with an estimated 80,000 recorded against the 51,582 in 1942, the highest total for any previous year.

NUMBER OF MARRIAGES BY MONTH REPORTED

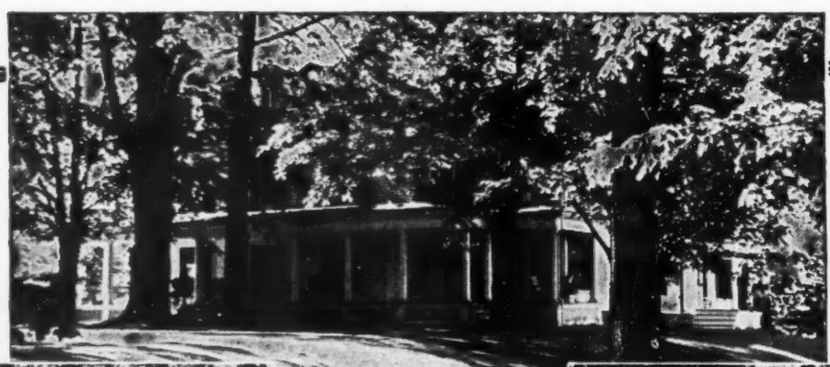
	1944	1945	1946
September	3,817	4,776	9,136
January through September	30,600	32,221	58,888
Total for year	41,678	48,329	.....

INCIDENCE OF COMMUNICABLE DISEASE

Disease	October, 1946	October, 1945	7-year median
Diphtheria	12	66	41
Gonorrhea	1,080	1,030	806
Lobar Pneumonia	49	49	121
Measles	102	401	175
Menningo Meningitis	9	12	8
Pertussis	886	553	680
Poliomyelitis	227	46	66
Scarlet fever	455	442	442
Syphilis	1,827	1,282	1,057
Tuberculosis	589	438	526
Typhoid fever	5	6	12
Undulant fever	7	23	10
Smallpox	1	0	1

WEHENKEL SANATORIUM

ROMEO



MICH.

PRIVATE ESTATE

RESTFUL AND QUIET

CONVALESCENT HOME FOR TUBERCULOSIS

A MODERN, comfortable sanatorium adequately equipped for all types of medical and surgical treatment of tuberculosis. Sanatorium easily reached by way of Michigan Highway Number 53 to Corner of Gates St., Romeo, Michigan.

For Detailed Information Regarding Rates and Admission Apply

DR. A. M. WEHENKEL, Medical Director, City Offices, Madison 3312-3

Say you saw it in the Journal of the Michigan State Medical Society

Strict Attention to Each Prescription

ARTIFICIAL LIMBS

A complete selection and choice of latest refinements

ORTHOPEDIC BRACES

Constructed in our modern shop by skilled mechanics with many years experience

SURGICAL GARMENTS

Fitted by experienced persons from stock or custom made if necessary

D. R. COON CO.

4200 WOODWARD AVE.

CORNER OF WILLIS

TEMPLE 1-5103 DETROIT 1

Successor to Otto K. Becker Company

FERGUSON-DROSTE-FERGUSON RECTAL CLINIC AND HOSPITAL

Ward S. Ferguson, M.D. James C. Droste, A.B., M.D. Lynn A. Ferguson, B.S., M.D.

PRACTICE LIMITED TO
DIAGNOSIS AND TREATMENT OF

ANUS, RECTUM, SIGMOID AND COLON

Sheldon Avenue at Oakes
GRAND RAPIDS 2, MICHIGAN

Woman's Auxiliary

NEW OFFICERS BEGIN YEAR'S DUTIES

Officers of the Woman's Auxiliary of the Michigan State Medical Society elected at the annual meeting in September have now assumed their respective duties, and committee chairmen have been appointed to carry on the work of the coming year. The roster of officers and committee chairmen is as follows:

Woman's Auxiliary Officers

President—Mrs. Retla Alter, 801 S. West Avenue, Jackson

President-elect—Mrs. T. Grover Amos, 2007 W. Boston Blvd., Detroit

Vice President—Mrs. Leonard Himler, 1615 Wells Street, Ann Arbor

Honorary President—Mrs. Guy L. Kiefer, 834 Rosewood Ave.. E. Lansing

Past President—Mrs. Lloyd C. Harvie, 417 Ardussi Ave., Saginaw

Treasurer—Mrs. Homer Stryker, 448 Inkster St., Kalamazoo

Secretary—Mrs. John W. Wholihan, 602 W. Michigan, Jackson

Committee Chairmen

Advisory—Philip Riley, M.D., 500 S. Jackson St., Jackson

Archives—Mrs. Horace French, 1620 W. Main Street, Lansing

Bulletin—Mrs. E. Gifford Upjohn, 2230 Glenwood Ave., Kalamazoo

Finance—Mrs. Roger Walker, 1507 Iroquois Ave., Detroit 14

Historian—Mrs. John J. Walch, 709 Fifth Ave., Escanaba

Hygeia—Mrs. S. A. Fiegel, 500 Michigan Ave., Sturgis

Legislation—Mrs. R. Bruce Macduff, 2515 Parkside Dr., Flint 3

Organization—Mrs. Leonard Himler, 1615 Wells Street, Ann Arbor

Parliamentarian—Mrs. G. Rex Bullen, 418 Third Street, Jackson

Press—Mrs. Charles MacCallum, Box 222, Midland

Program—Mrs. H. P. Kooistra, 1564 Pontiac Rd., Grand Rapids

Public Relations—Mrs. Frederick Pietz, 2139 Gratiot St., Saginaw

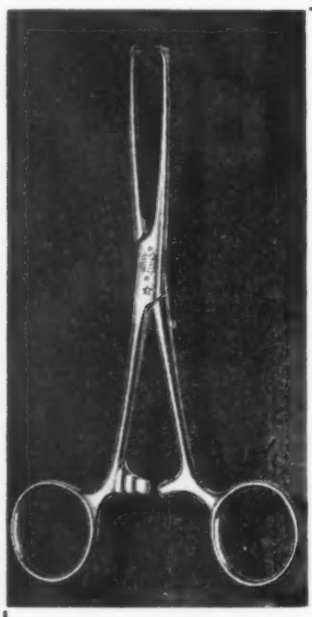
TB Speaking Project—Mrs. Milton Shaw, 415 West Avenue, Lansing

Revision—Mrs. Alfred LaBine, 1019 College Ave., Houston

Student Loan Fund—Mrs. R. E. Scrafford, 2210 McKinley St., Bay City

Postwar Planning—Mrs. E. W. Meredith, 503 Edison St., Port Huron

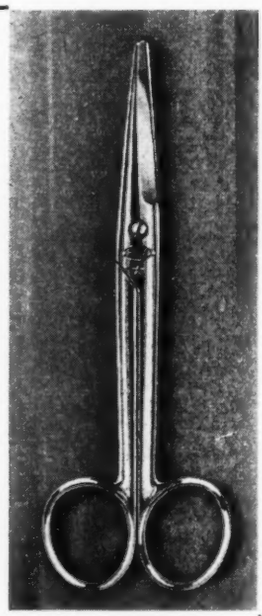
Auxiliary News—Mrs. Frank F. Pray, 310 Steward Ave., Jackson



Ingrams *Detroit 1*

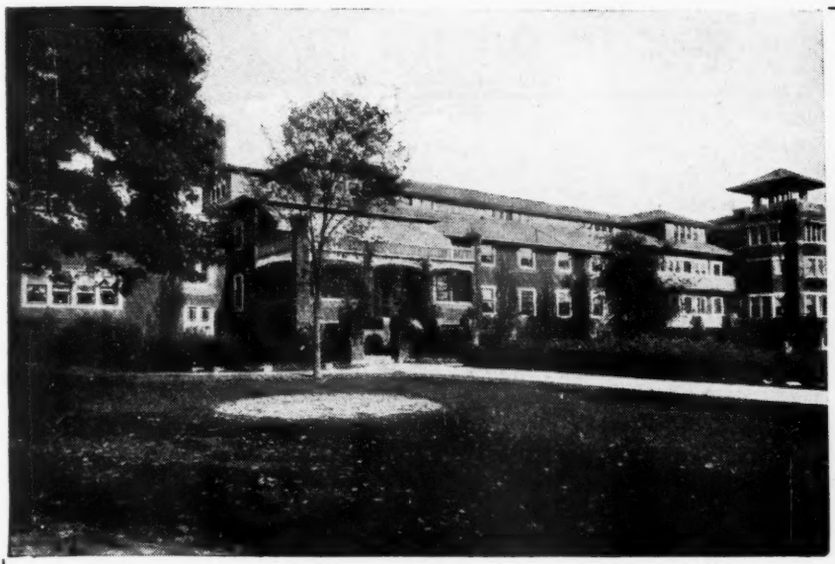
INGRAMS for INSTRUMENTS

Unusually Complete Stock
of **Stainless Steel**
and Plated Instruments



The G. A. Ingram Company

4444 WOODWARD **DETROIT 1** **Tel. TEmple 1-6880**



North Shore Health Resort

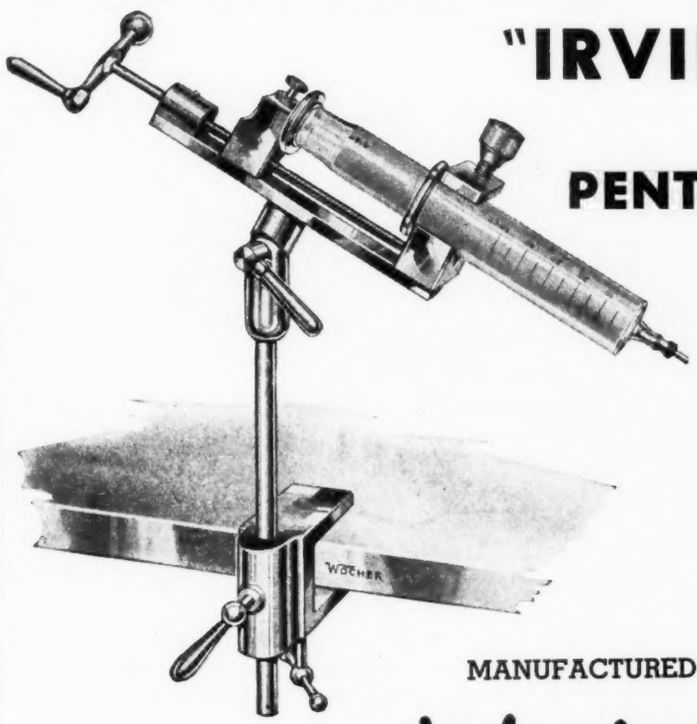
Winnetka, Illinois

on the Shores of Lake Michigan

A completely equipped sanitarium for the care of
nervous and mental disorders, alcoholism and drug addiction
offering all forms of treatment, including electric shock.

SAMUEL LIEBMAN, M.S., M.D.
Medical Director

225 Sheridan Road **Phone Winnetka 211**



"IRVIN" INJECTOR

FOR

PENTOTHAL SODIUM

An improved device that offers these important features:

- Positive, steady feed—no accidental overdose.
- 20 c.c., 30 c.c., 50 c.c. syringes fit same holder.
- Instant retraction of propelling block
- Syringe placed or replaced in 5 seconds.
- Holder is universally adjustable.
- Sterilizable—non-rust throughout.

No other device offers all the features of the new "IRVIN" Pentothal Sodium Injector.

PRICE $36.00

MANUFACTURED BY

Wocher's

DETROIT BRANCH
ROLAND RANDOLPH, MGR.

TEMPLE 2-2440
4611 WOODWARD AVE.
DETROIT 1, MICH.

In Memoriam

Edward J. Agnelly, M.D., Detroit, was born in New Orleans, September 30, 1877. He graduated from Tulane and Columbia universities, after which he received his medical degree from the Detroit College of Medicine in 1907. He was a veteran of World War I having entered as a lieutenant in the Army Medical Corps and rising to a lieutenant colonelcy in command of the reconstruction hospital at Camp Dix at the close of the war. He was the founder of the American Legion's billet at Otter Lake for the orphaned children of American war veterans. Doctor Agnelly died in Detroit on September 5, 1946.

* * *

James Deacon Bruce, M.D., Ann Arbor, was a native of Blackstock, Ontario, in 1872. He came to the United States in 1892 to enroll in the Detroit College of Medicine and Surgery from which institution he was graduated in 1896. For a number of years, he engaged in private practice in Saginaw. As a Captain in the Canadian Army Medical Corps in 1916, Doctor Bruce had charge of medical service at the Duchess of Connaught base hospital on the Taplow estate of Lord Astor, near London. Upon the entry of the United States into the war, Doctor Bruce resigned his commission to accept a captaincy and the direction of the surgical service in the American Red Cross evacuation hospital near Paris, later becoming its commanding officer. In 1925 Doctor Bruce returned to the University of Michigan Medical School as director of the department of internal medicine and chief of medical service of the University Hospital. He was made director of the department of postgraduate medicine in 1928, vice-president in charge of university relations in 1931, and chairman of a new division of health sciences in 1938. He held numerous posts on state and national bodies concerned with medical education. He was made a Fellow of the American College of Physicians in 1925, served as American College of Physicians governor for Michigan from 1930-36, regent in 1936, and president, 1940-41. He became a Fellow of the American College of Surgeons in 1919. On his retirement, the University of Michigan awarded him the honorary degree of doctor of science in medical education for his nationally accepted concepts of health services and for his work as physician, teacher and administrator in promoting the public welfare of the state. Doctor Bruce died in Ann Arbor on September 5, 1946.

The House of Delegates, at its 81st Annual Session in Detroit, September 24, 1946, unanimously passed the following memorial resolution in honor of Doctor Bruce:

WHEREAS, The House of Delegates of the Michigan State Medical Society regrets the recent death of the late Dr. James D. Bruce, and

WHEREAS, Dr. Bruce was an outstanding practitioner of medicine and surgery in his home town of Saginaw for many years, and

WHEREAS, he ably served as a member of The Council of the Michigan State Medical Society for three successive terms, and

WHEREAS, in his later years, his untiring devotion to the cause of medical education, resulted in the placing on a firm footing the postgraduate medical education program of the Michigan State Medical Society and

WHEREAS, his influence was instrumental in establishing the Children's Clinics at Marquette and Traverse City,

THEREFORE, BE IT RESOLVED, That the House of Delegates of the Michigan State Medical Society register its grief and extend its deep sympathy to Mrs. Bruce and family at the loss of such an outstanding member, and express its appreciation of his services to the principles of organized medicine, and

BE IT FURTHER RESOLVED, that a copy of this resolution be spread on the minutes of the House of Delegates and a copy transmitted to Mrs. Bruce.

* * *

Ray E. Dean, M.D., Three Rivers, was born February 16, 1879, in Girard, Michigan. He was graduated from the University of Michigan Medical School in 1908, and had practiced medicine in Three Rivers since that time. Doctor Dean was a former secretary of the St. Joseph County Medical Society. He died at his home on November 4.

* * *

William P. Derck, M.D., Marysville health officer, physician and surgeon more than fifty years, died September 2, in Port Huron, at the age of seventy-nine.

Dr. Derck, who had been ill for many months, celebrated his fiftieth anniversary as a practicing physician and surgeon in 1944. He was the first president of the St. Clair County Medical Society and the first staff president of Port Huron Hospital. He was made a Member Emeritus of the Michigan State Medical Society in 1945.

Dr. Derck was born in Valley City, Ohio, October 12, 1866. He was graduated from the Detroit College of Medicine and took his undergraduate work at Toronto University. He came to Port Huron fifty-two years ago, after serving his internship in St. Mary's Hospital, Detroit. He was the last president of the Port Huron Academy, serving in that capacity when it became the St. Clair County Medical Society.

He was a member and former vestryman of Grace Church and a member of Marysville lodge No. 498, F. & A. M., and Port Huron Commandery No. 7, Knights Templar.

He is survived by his widow, Mrs. Margaret M. Derck, whom he married April 11, 1917, and a daughter, Mrs. Bruce N. Tappan, Grosse Pointe; a stepson, Milton C.

(Continued on Page 1672)

THE HAVEN SANITARIUM, INC.

1850 PONTIAC ROAD **ROCHESTER, MICHIGAN**

Telephone 9441

A private hospital 25 miles north of Detroit for the diagnosis and treatment of mental illness.

LEO H. BARTEMEIER, M.D., CHAIRMAN OF THE BOARD
GRAHAM SHINNICK, MANAGER

SKELETAL MUSCLE SPASM

Observations indicate* that Esertropin can relieve muscle spasm, contractures, pain, and fatigue in such conditions as:

Rheumatoid Arthritis **Fibrositis**

Calcified Bursitis **Spondylitis**

Post-traumatic Disabilities

An important object of Esertropin therapy is to prevent or lessen deformities resulting from neuromuscular dysfunction. Esertropin is available in hypodermic tablets containing physostigmine salicylate and atropine sulfate.

ESERTROPIN

Endo

THE G. A. INGRAM COMPANY

4444 Woodward Avenue **Detroit 1, Mich.**

*Cohen, A., Trommer, P., and Goldman, J., J.A.M.A., 130:265, 1946.

(Continued from Page 1670)

Wood; two sisters, Mrs. Harry C. Philip and Miss Elizabeth Derck, all of Detroit; and a granddaughter, Miss Mary Ellen Tappan, Grosse Pointe.

* * *

Shakir E. Far, M.D., Quincy, was born in Palestine, August 13, 1888. He came to the United States with his parents in 1904. Doctor Far was graduated from the University of Illinois medical school, following which he entered the practice of medicine in Battle Creek, later moving to Quincy where he remained in practice for twenty-five years. Doctor Far died in Quincy on July 18, 1946.

* * *

Arthur L. Gignac, M.D., Detroit, was born on May 19, 1887, in Tilbury, Ontario. He entered Detroit College of Medicine in 1910, after receiving his early education in Windsor, and was graduated in 1914. He served for many years on the staff of St. Mary's Hospital. Doctor Gignac died on October 8, 1946, in Detroit.

* * *

Jesse James Holes, M.D., Battle Creek, was born in Barry County Michigan, August, 1871. He was graduated from the Detroit College of Medicine, served as a captain in the Army Medical Corps in World War I, including a period overseas. Dr. Holes was made a Retired Member of the Michigan State Medical Society in September, 1944. He died in Florida on January 19, 1946.

James A. Humphrey, M.D., Monroe, was born September 12, 1882, at Wayland, Michigan. He was graduated from Hahnemann Medical College of Chicago in 1908. From 1911 until his entry into the Army Medical Corps in 1917, he practiced in Lansing. He served with the 85th Infantry Division in World War I, going overseas July 30, 1918, and seeing front line action from September 12 until the signing of the Armistice. Following discharge from the Army in 1919, Doctor Humphrey returned to Lansing for a period and later moved to Monroe where he practiced till his death on October 14, 1946.

* * *

Ladislaus R. Kaminski, M.D., Detroit, staff physician at Providence Hospital for fifteen years, died August 15, 1946. He practiced in Detroit for thirty years. He was a veteran of World War I, having served as a captain in the Army Medical Corps with the Grace Hospital Unit.

* * *

A. S. Kitchen, M.D., Escanaba, was born August 30, 1875. He studied medicine at the University of Toronto, graduating in 1899. He began his medical practice at Rapid River and moved to Escanaba in 1903 where he remained until his death on October 30, 1946.

* * *

Walter W. Lang, M.D., Kalamazoo, was born in South Bend, Indiana, coming to Michigan when he was a young

(Continued on Page 1674)

 SPHERES  CYLINDERS  PRISMS  NEUTRAL LIGHT ABSORPTION

WHAT IS THE 4th PRESCRIPTION COMPONENT?

The highly complicated process of prescribing efficient, comfortable lenses calls for a skillful use of all four components of the ophthalmic prescription. **Neutral light absorption,** the 4th component, is used to bring comfort and satisfaction to light-sensitive eyes. It is most widely prescribed in Soft-Lite, the **neutral absorptive lenses,** which are fashioned to exacting standards.

★

CUMMINS OPTICAL COMPANY

4th Floor Kales Building
(Facing Grand Circus Park)
Detroit 26, Michigan
Office Hours

Daily 9 to 5 — **Mondays to 7 P. M.**
CAdillac 7344 — **76 W. Adams**

DRINK

Coca-Cola

REG. U. S. PAT. OFF.

You trust
its quality

Schieffelin
BENZESTROL
(2, 4-di (p-hydroxyphenyl) - 3-ethyl hexane)

the Preferred Estrogen

ACCEPTED
AMERICAN MEDICAL ASSN.

COUNCIL ACCEPTED

Schieffelin BENZESTROL is rapidly becoming the therapeutic agent of choice where estrogen therapy is indicated. Clinical potency, marked tolerance and economy are the features to recommend its use.

Available in tablets, potencies of 0.5, 0.1, 2.0 and 5.0 mg.; in 10 cc. vials containing 5.0 mg. per cc., and in ellipsoid shaped vaginal tablets of 0.5 mg. strength, the physician has a choice of three modes of administration.

Literature and Sample on Request

Schieffelin & Co.

Pharmaceutical and Research Laboratories
20 Cooper Square New York 3, N. Y.

MICHIGAN ARTIFICIAL LIMB CO.

Michigan Agents for

THE J. F. ROWLEY CO.

Established 1885

MANUFACTURERS OF

The Original "Rowley Leg"

TEMPLE 1-7320

3939-45 John R.

DETROIT

AS IN THE PAST

The same friendly and co-operative advice will continue to be extended physicians and surgeons in the rehabilitation of their patients.

GUY F. FULTS

All important laboratory examinations; including—

Tissue Diagnosis

The Wassermann and Kahn Tests

Blood Chemistry

Bacteriology and Clinical Pathology

Basal Metabolism

Aschheim-Zondek Pregnancy Test

Intravenous Therapy with rest rooms for Patients.

Electrocardiograms

Central Laboratory

Oliver W. Lohr, M.D., Director

537 Millard St.
Saginaw

Phone, Dial 2-4100—2-4109

The pathologist in direction is recognized by the Council on Medical Education and Hospitals of the A. M. A.

(Continued from Page 1672)

boy. He attended the University of Michigan Medical School in 1901-02; in 1903 he entered Hahnemann Medical College in Chicago from which school he graduated in 1905. Doctor Lang's entire medical career was spent in Kalamazoo where he died on November 4.

* * *

Vernon James McGrath, M.D., Reed City, was born in Rochester, New York, on September 21, 1906. He attended University of Detroit and graduated from Wayne University College of Medicine in 1935. He had practiced in Reed City since 1936. He was a member of the Phi Rho Sigma medical fraternity, a Fellow of the American Medical Association, past president of the Mecosta-Osceola Medical Society, member of the staff of Reed City Hospital. Doctor McGrath died in Reed City on August 24, 1946. He had the distinction of being one of the first patients who had insulin therapy for diabetes and used it continuously for the past twenty-two years.

* * *

Paul Roth, M.D., Battle Creek, was born in Switzerland, coming to the United States at the age of sixteen. He is a graduate of the American Medical Missionary College. He was a pioneer in the use of oxygen for medical treatment and metabolism testing. Doctor Roth was a Retired Member of the Michigan State Medical Society since 1944. He died in Battle Creek on November 7.

* * *

Cortland W. Schepeler, M.D., Brooklyn, was born in Correy, Pennsylvania. He was graduated from the Homeopathic Medical School in 1915, and served his internship at the Homeopathic Hospital in Ann Arbor, after which he established his practice in Brooklyn. Doctor Schepeler served in the Army Medical Corps during World War I from July 10, 1917 to June, 1919. Doctor Schepeler died in Jackson on October 27, 1946.

* * *

Gustaf Sjolander, M.D., Midland, was born July 8, 1872, in Nalden, Sweden. He came to the United States at the age of sixteen with his parents and settled at Ishpeming. He was graduated from the Saginaw Valley Medical College, Saginaw, in 1903, and had practiced in Midland since that time. Doctor Sjolander died in Midland, September 6, 1946.

* * *

John W. Speck, M.D., Jackson, died at his home on September 8, 1946. Doctor Speck was on the staff of Foote and Mercy Hospitals. He had been a resident of Jackson since 1927 when he became superintendent of medicine at the Southern Michigan prison. He had been in private practice since 1935.

* * *

Kenneth Stuart, M.D., Bay City, was born in Simcoe, Ontario, February 3, 1901. He graduated from the University of Toronto, receiving his medical degree in 1926. He interned at Buffalo General Hospital, Buffalo, N. Y., St. Francis Hospital, New York City, and Schenectady General Hospital, Schenectady, New York.

Say you saw it in the Journal of the Michigan State Medical Society

The Measure of Quality

"300 GAME" in Bowling
SEALTEST in Milk

It takes years of practice to bowl a "perfect" game. And, it takes years of skill and experience to bring you, day after day, a milk that is outstanding in *Taste, Purity* and *Wholesomeness.*

Every bottle of Sealtest Milk meets this true Measure of Quality. Every glassful is safeguarded by Sealtest Laboratory Controls in our great modern dairies.

No wonder American housewives buy more *Sealtest* Milk than any other kind, *by a wide margin.*

For *extra* food value—ask for our *nutritionally-improved* Sealtest Vitamin "D" Homogenized Milk.

Sealtest MILK

You can always depend on Sealtest Quality

DIVISION OF NATIONAL DAIRY PRODUCTS CORPORATION

Doctor Stuart had practiced in Bay City since 1929. He died while visiting in Ontario on August 27, 1946.

* * *

Norman G. Tufford, M.D., Detroit, died early in August in Eskilstuna, Sweden, while visiting with his wife and daughter at Mrs. Tufford's family home. Doctor Tufford was a graduate of the University of Toronto where he received his medical degree in 1923. Doctor Tufford was buried in Sweden.

* * *

Dale E. Thomas, M.D., Saginaw, was born October 25, 1904, in Flint, but spent virtually his entire life in Saginaw. He was graduated from the University of Michigan Medical School in 1928 and interned at Saginaw General Hospital, after which he entered private practice in Saginaw. Doctor Thomas was a former secretary of the Saginaw County Medical Society. He died suddenly on November 5 in Saginaw.

THE STOKES SANITARIUM 923 Cherokee Road, Louisville, Kentucky

Our **ALCOHOLIC** treatment destroys the craving, restores the appetite and sleep, and rebuilds the physical and nervous condition of the patient. Liquors withdrawn gradually; no limit on the amount necessary to prevent or relieve delirium.

MENTAL patients have every comfort that their home affords.

The **DRUG** treatment is one of gradual Reduction. It relieves the constipation, restores the appetite and sleep; withdrawal pains are absent. No Hyoscine or rapid withdrawal methods used unless patient desires same.

NERVOUS patients are accepted by us for observation and diagnosis as well as treatment.

E. W. STOKES, Medical Director, Established 1904.

Telephone—Highland 2101

★

Dear Doctor, please let us know if you have not received one of our 1947 desk calendars. We have a few appointment books to spare.

★

Physicians' Service Laboratory

M. S. Tarpinian, Director

(1st Lt. Sn.C., Active Reserve)

CAdillac 7940

610 KALES BLDG. DETROIT 26

What's What

The American Medical Association's Centennial will be celebrated in Atlantic City, June 9-13, 1947.

* * *

Federal narcotic licenses must be renewed annually on or before July 1. Send remittance to the Narcotic Bureau, Federal Bldg., Detroit.

* * *

G. Don Cummings, M.D., head of the State Health Department Laboratory, visited Ireland in November to help curb a diarrhea epidemic among newborn babies.

* * *

Harvey C. Hansen, M.D., announces the opening of offices at 417 Post Building, Battle Creek, Michigan, with practice limited to Orthopedic Surgery. Dr. Hansen is just returning to private practice after Army service.

* * *

Henry E. Perry, M.D., of Newberry, President of the Michigan State Medical Society in 1936-37, was a visitor in the Executive Offices on October 28. Dr. Perry, now eighty-one years of age, resides in Lakeland, Florida, six months of every year.

* * *

Naval Medical Officers are needed in the Naval Air Reserve Training program. If interested in full-time active duty, contact the Bureau of Naval Personnel, Chief of Naval Air Reserve Training, Naval Air Station, Glenview, Illinois.

* * *

R. S. Breakey, M.D., Lansing, was named President-elect of the North Central Section, American Urological Association, at the 20th annual meeting held in Rochester, Minnesota, early in November. Dr. Breakey is also President-elect of the Ingham County Medical Society, Michigan.

* * *

1947 Michigan State Medical Service Dues and Assessments. The MSMS dues for 1947 will remain at $12.00. The assessment for public relations and information, levied by the 1946 House of Delegates, will be $25.00. This makes a total of $37.00 per capita payable to the Michigan State Medical Society in 1947. These payments are deductible in reporting income taxes.

* * *

The Michigan State Medical Society's 82nd Annual Session will be held at the Pantlind Hotel-Civic Auditorium, Grand Rapids, from Tuesday noon to Friday noon, September 23-26, 1947. Twenty-eight (28) eminent guest-speakers from all parts of the United States and Canada will be presented on the General Assembly program.

DeNIKE SANITARIUM. Inc.

Established 1893

ACUTE AND CHRONIC ALCOHOLISM AND DRUG ADDICTION

— Telephones —
DIxon 1433-1434
CAdillac 2670

626 E. Grand Blvd., Detroit 7

A. James DeNike, M.D., Medical Superintendent

ALPHA-PERLES

(Formerly Calpho-Perles) Rx 1790

A time-tested formula, since 1932, indicated for certain degenerative conditions due to dietary deficiencies.

formula

Each 6 Perles (daily dosage) contains:
Chlorophyll compound (from green plants) .....1-1/5 Grs.
Natural bone phosphate with other active minerals as exist normally in bone ..... 24 Grs.
Colloidal Iron ..... 1½ Grs.
Manganese .....0.22 Gr.

Vitamin D Concentrate from natural sources biologically tested, the equivalent in vitamin A and D potency to 3 teaspoonfuls of Cod Liver Oil. Obtainable in cartons of 180 or 60 Perles each.

DETROIT PROFESSIONAL LABORATORIES
510 STROH BLDG.
DETROIT 26, MICHIGAN

A. S. Brunk, M.D., Detroit, President of the Michigan Health Council, spoke on "The Aims and Purposes of the Michigan Health Council" at the 26th Annual Michigan Public Health Conference, Pantlind Hotel, Grand Rapids, on October 30. He also addressed the American Association of Physicians and Surgeons in Chicago, November 8, on "Accomplishments of the Conference of Presidents of State Medical Societies."

* * *

The AMA Committee on National Emergency Medical Service has mailed 45,000 questionnaries to discharged medical officers of World War II. This postwar questionnaire requests information on the general and military status of the medical veteran, training, assignments, and professional skills. For copies of the questionnaire write the NEMS Committee, American Medical Association, 535 N. Dearborn, Chicago 10, Illinois.

* * *

Thoracic Diseases will be the subject of a postgraduate course sponsored by the American Trudeau Society in co-operation with the University of Wisconsin Medical School, to be held at Madison, March 3-8, 1947. Fee: $50. The course is intended primarily for physicians of Michigan, Wisconsin, Ohio, Indiana, Illinois, Missouri, Iowa, and Minnesota. For application blanks write Cameron St. C. Guild, M.D., Executive Secretary, American Trudeau Society, 1790 Broadway, New York 19.

* * *

Wilfrid Haughey, M.D., Editor of THE JOURNAL of the Michigan State Medical Society, addressed the Junior Chamber of Commerce of Midland on "Political Medicine." He discussed the Wagner-Murray-Dingell Bills, and the efforts of the Medical Profession to meet the increasing demands of the people for more security in their health service. The Taft-Smith-Ball Bill No. S. 2143 was outlined, and its *nonregimentation* principles were stressed as making it much more suitable for our needs.

* * *

Honors to our advertisers.—Nathan Hack, President and founder of the Hack Shoe Company, was elected Honorary President of the Michigan Retail Shoe Dealers Association at the annual convention held in Detroit, November 3, 4, 5 and 6. Clyde K. Taylor of Rackham's Inc., was elected President of the Association, while Morton Hack, elder son of Nathan Hack, was elected as Vice President and Editor of "Footsteps," the Association's monthly publication. Mr. Hack's second son, Leonard, is President of the Detroit Shoe Retailers Association.

* * *

The achievements of the medical profession in the field of fine arts has been well publicized by the American Physicians' Art Association, of which Harvey Agnew, M.D., of 280 Bloor St., W., Toronto 5, Canada, is President, and by its sponsor, Mead Johnson & Co. of Evansville, Indiana.

At the AMA Centennial in Atlantic City next June, $34,000 in Savings Bonds for the special contest "Courage and Devotion Beyond the Call of Duty" (in war and in peace) will be awarded.

* * *

Relief grants are up and so are the rolls. The average Old Age assistance grant last month was $35.75 as com-

SODIUM HYPOCHLORITE

PRODUCT OF MANY USES. READ LABEL

Dependable — Convenient — Economical

QUARTS & HALF GALLONS SOLD AT GROCERS

New INSURANCE HEADQUARTERS

Equipped to give you dependable insurance counsel and sound, efficient, economical insurance service.

Jack and Richard Whiting, old friends of the medical profession, have broadened their services to include complete insurance coverage for the Doctor.

Ask About

New policy designed exclusively for physicians coveting loss of professional equipment, money and securities.
Broad Form—$25 Annually

Whiting and Whiting

GENERAL INSURANCE
CHERRY 9398
520 FORD BLDG. • DETROIT 26

Cook County
Graduate School of Medicine
(In Affiliation with Cook County Hospital)

Incorporated not for profit

ANNOUNCES CONTINUOUS COURSES

SURGERY—Two-week intensive course in Surgical Technique starting January 20 and February 17, 1947.

Four-week course in General Surgery starting February 3 and March 3, 1947.

GYNECOLOGY—Two-week intensive course on dates to be announced.

One week personal course in Vaginal Approach to Pelvic Surgery, dates to be announced.

MEDICINE—Two-week intensive course on dates to be announced.

General, Intensive and Special Courses in all Branches of Medicine, Surgery and the Specialties

TEACHING FACULTY — ATTENDING STAFF OF COOK COUNTY HOSPITAL

Address:
Registrar, 427 S. Honore St., Chicago 12, Ill.

Prenatal Instruction
At Its Best!

"Your Care During Pregnancy"

MAKES FRIENDS WHILE
IT WORKS FOR YOU

Sample and Prices on Request

Caduceus Press
ANN ARBOR, MICHIGAN
P. O. BOX 17

pared with $32.28 a year ago. Mothers' pensions increased from $67.30 a year ago to $78.08 this year and direct relief from $32.66 to $35.72. During the past year, relief rolls have jumped from 11,459 to 18,563. Social Welfare director F. F. Fauri will ask the next legislature for a revision of the Old Age Assistance law to permit grants higher than the present $40 per month, half of which is paid by the federal government.

—*Michigan Survey,* November 12, 1946.

* * *

Socialized Medicine gets a body blow from current scientific survey of state medicine in Russia, Germany, England and New Zealand, published by U. S. doctors and dentists opposed to Wagner-Murray-Dingell Bill.

To place all doctors, dentists and hospitals under federal bureaucratic control, the study concludes, would be to drop American standards of health and welfare into "the appalling quagmire of mediocrity in which we now find it in Germany, England and Russia after years of political medicine."

—*Nation's Business,* November, 1946

* * *

Public speaking class, Wayne County Medical Society: "The recommendations from the Speakers Bureau that a class in public speaking be set up by the Wayne County Medical Society for the membership was approved by The Council. The purpose of these classes will be to train new recruits for the Speakers Bureau so that the Society will have speakers available for both lay and medical groups and on any subject requested. The practical questions involved in setting up these classes will be handled by the Board of Trustees of the Speakers Bureau."—*Detroit Medical News,* October 28, 1946.

* * *

"Doctor of Medicine" the radio program over Station CKLW, each Friday at 12:45 p.m., has presented the following members of the Michigan State Medical Society as guest speakers (to November 1):

R. S. Morrish, M.D., Flint; L. Fernald Foster, M.D., Bay City; Ralph A. Johnson, M.D., Detroit; A. S. Brunk, M.D., Detroit; A. E. Catherwood, M.D., Detroit; A. E. Schiller, M.D., Detroit; Wyman C. C. Cole, M.D., Detroit; Joseph C. Molner, M.D., Detroit.

These programs are presented by the Radio Committee of the Michigan State Medical Society and are sponsored as a public service by the Hack Shoe Company, Detroit.

* * *

Children's Diabetic Camp.—Did you know that such a camp exists in Michigan?

It is named the Grace Hospital Children's Diabetic Camp and is under the direction of Grace Hospital, Woman's Auxiliary, Detroit. Last summer it was held at the Franklin Village Settlement Camp at Lake Orion, for a two weeks' period. The Hospital sent a resident and two interns, several nurses, a dietitian, as well as counsellors.

The Children's Diabetic Camp is for girls and boys, with separate quarters.

So far as is known, the nearest other children's diabetic camp is Dr. John's, located in Cleveland, Ohio.

Say you saw it in the Journal of the Michigan State Medical Society

Medical Veterans' Appreciation for Remission of MSMS Dues.—The following resolution was presented to and adopted by the House of Delegates of the Michigan State Medical Society at its 1946 Annual Session in Detroit:

"WHEREAS, Returning medical veterans have been faced with innumerable problems and considerable expense in re-establishing their practices; and

"WHEREAS, The majority of medical veterans have had their income considerably curtailed for the past several years; and

"WHEREAS, The medical veterans are anxious to maintain their affiliation with the State Medical Society, therefore be it

"RESOLVED, That the Medical Veterans of World War II express their very sincere appreciation to the Michigan State Medical Society for its remission of dues granted to the medical veterans."

* * *

More Preventive Medicine Needed.—

"WHEREAS, A major inadequacy in the civilian health protection in war as in peacetime continues from the failure of many states and of not less than half the counties in the states to provide even minimum necessary sanitary and other preventive services for health, by full-time professionally trained medical and auxiliary personnel on a merit system basis supported by adequate tax funds from local and state and where necessary from federal sources; therefore be it

"RESOLVED, That the Trustees of the American Medical Association be urged to use all appropriate resources and influences of the Association to the end that, at the ealiest possible date, complete coverage of the nation's area and population by local, county, district or regional full-time modern health services be achieved."

—Proceedings of the House of Delegates of the American Medical Association, the ninety-third annual session, Atlantic City, N. J., 1942.

* * *

The Council of the British Medical Association (in opposing the National Health Service Bill which was introduced in Parliament on March 21, 1946) has restated four principles which are considered essential to good medical service and have a direct bearing on any proposal to change the system under which medical services are rendered. The principles are: (1) The medical profession is, in the public interest, opposed to any form of service which leads directly or indirectly to the profession as a whole becoming full-time salaried servants of the state or local authorities. (2) Doctors should, like other workers, be free to choose the form, place, and type of work they prefer without governmental or other regulation. (3) Every registered medical practitioner should be entitled as a right to participate in the public service. (4) There should be adequate representation of the medical profession on all administrative bodies associated with the new service in order that doctors may make their contribution to the efficiency of the service. (British Medical Journal, March 30, 1946, page 474)

—Extract from the Monthly News Letter of the American College of Radiology

ARTIFICIAL LIMBS

New and Improved Artificial Legs and Arms

F. O. PETERSON
All work under the supervision of F. O. Peterson, President.

Precision made, artificial limbs manufactured by us have made Rowley users capable of doing most everything the normal person can do.

FULL RANGE OF BRACES AND ORTHOPEDIC APPLIANCES

TO. 8-6424

E. H. ROWLEY CO.

F. O. PETERSON, Pres.

11330 WOODWARD AVE. • DETROIT 2

35 Years in Business

BRANCH: 120 S. DIVISION ST., GRAND RAPIDS

You Should Attend!

Previous conferences have proved their worth. The next will be even more outstanding. Those who attended are returning. You too are invited.

Four intensive postgraduate days in the truly great medical center.

Chicago Medical Society Annual Clinical Conference

March 4, 5, 6 and 7, 1947

Palmer House

Chicago

•

Make Your Hotel Reservation Now

A few of the newer pharmaceuticals which we have in stock for immediate delivery . . .

FURACIN

A new chemotherapeutic compound for treatment of wounds and surface infections.

ANTI RH SERUM

A diagnotsic agent for the rapid and accurate determination of RH factor in human blood by the microscopic slide agglutination method.

BLOOD GROUPING SERA

(Powdered)

Anti A Anti B

Literature available on request

The Rupp & Bowman Company

315-319 Superior St.

Toledo, Ohio

Medical Economics

An original plan to increase your income from professional services. It is ethical. It has proven its worth in thousands of doctors' offices.

Crane Discount Corporation

230 W. 41st St. New York 18, N. Y.

EMIC APPLICATIONS DROP

During the first six months of 1946 an average of 1506 EMIC applications were received each month. During September, 991 applications were made and in October, 920.

MT. CARMEL MERCY HOSPITAL

Annual Clinic Day Program

January 29, 1947

9:00 A.M.—Speech of Welcome
The program will follow immediately, and will include the following speakers:

Gordon B. Meyers, M.D., Professor of Medicine, Wayne University
Subject: Recent Advances in Therapy

Jerome W. Conn, M.D., Associate Professor of Medicine, University of Michigan
Subject: Some Newer Concepts of Diabetes.

Willard Owen Thompson, M.D., Professor of Medicine, University of Illinois
Subject: Glandular Problems in Childhood

Richard W. TeLinde, M.D., Professor of Gynecology, Johns Hopkins University
Subject: Tumors of the Female Genital Tract

J. Dewey Dodrill, M.D., Director Chest Surgery, Mt. Carmel Mercy Hospital
Subject: Surgery of the Heart and Great Vessels

Leland Sterling McKittrick, M.D., Professor of Surgery, Harvard University
Subject: Peptic Ulcer, Surgical Management.

James C. Sargent, M.D., Professor of Urology, Marquette University
Subject: Calculus Disease of the Genito-Urinary Tract

Speaker at noon luncheon:
Mr. Graham L. Davis, Director of W. K. Kellogg Foundation, Michigan's Hospital Plan

Speaker at evening banquet:
Nathan Gist, New York
The Final Test of Democracy

(Members of the Michigan State Medical Society are welcome.)

CONJUNCTIVITIS

(Continued from Page 1618)

2. The coagulose test was found to be positive in all cases of hemolytic staphylococcus aureus. Non-hemolytic, staphylococcus aureus, hemolytic and non-hemolytic staphylococcus albus cases were reported negative.

3. Two medical officers conduct the EENT Department at this hospital that has an average monthly rate of 3,000 or more new and old patient treatments.

4. A simple technique is suggested as a time-saver in a busy clinic.

References

1. Allen, J. H., and Wood, M. A.: Conjunctivitis in Iowa. J. Iowa M. Soc., 28:561, (Nov.) 1938.
2. Duke-Elder: Textbook of Ophthalmology. Vol. 2, p. 1534. St. Louis: C. V. Mosby Co., 1938.

A COMPLETE LINE OF Zemmer PHARMACEUTICALS

Laboratory controlled ethical pharmaceuticals.

Chemists to the Medical Profession for 44 years.

Mc 12-46 *The Zemmer Company*

Oakland Station • PITTSBURGH 13, PA.

THE DOCTOR'S LIBRARY

Acknowledgment of all books received will be made in this column and this will be deemed by us as a full compensation of those sending them. A selection will be made for review, as expedient.

PENICILLIN, ITS PRACTICAL APPLICATION. Under the general editorship of Professor Sir Alexander Fleming, M.B., B.S., F.R.C.P., F.R.C.S., F.R.S. Professor of Bacteriology in the University of London, St. Mary's Hospital, London. Philadelphia: The Blakiston Company, 1946. Price $7.00.

Twenty-eight specialists tell the story of penicillin from its preparation to the use in every sort of condition where it is useful. The methods of administration, dosage, best methods of application, and selection of cases is given. Tables are published showing the results of use as compared to other agents. There are many illustrations and illustrative case reports. It is a handy and worth while reference.

ELECTROCARDIOGRAPHY IN PRACTICE. By Ashton Graybiel, M.D., Captain Medical Corps, U. S. Naval Reserve, Coordinator of Research, U. S. Naval School of Aviation Medicine, Pensacola, Florida, and Paul D. White, M.D., Lecturer in Medicine, Harvard Medical School; Physician, Massachusetts General Hospital. Second Edition, with 323 illustrations. Philadelphia: W. B. Saunders Company, 1946. Price, $7.00.

This is the second edition of a previously well-received volume, and the original purpose—"to aid in the interpretation of electrocardiograms which are commonly seen in medical practice"—remains unchanged. Much new material is presented; a section on precordial leads has been added and ample new illustrations of normal and abnormal tracings with fuller and more complete case records included. The interpretation of the electrocardiogram is presented first, clinical findings following and finally, a comment is added to complete the analysis of the case.

The volume is composed of five parts. The first part is devoted to essential physiologic principles and technique, including the above-mentioned section on precordial leads. The second part emphasizes the broad range of the normal patterns and the third part deals with the various disorders of rhythm. In the fourth part the changes and patterns in the various diseases which affect the heart is especially well treated. A discussion of artifacts is also included. The fifth part presents an entirely new series of "test" electrocardiagrams for practice in interpretation. Two appendices dealing with unipolar and esophogeal leads and the effect of exercise and low oxygen inhalation tests complete this volume.

Because of its distinguishing general format and style, ample new illustrations and tables and thorough discussion of the most recent advances in clinical electrocardiography, this edition is highly recommended for the library of any physician interested in heart disease.

ACCIDENT • HOSPITAL • SICKNESS

INSURANCE

FOR PHYSICIANS, SURGEONS, DENTISTS EXCLUSIVELY

ALL PREMIUMS COME FROM — PHYSICIANS SURGEONS DENTISTS — ALL CLAIMS GO TO

$5,000.00 accidental death *$25.00 weekly indemnity, accident and sickness*	**$8.00** *Quarterly*
$10,000.00 accidental death *$50.00 weekly indemnity, accident and sickness*	**$16.00** *Quarterly*
$15,000.00 accidental death *$75.00 weekly indemnity, accident and sickness*	**$24.00** *Quarterly*
$20,000.00 accidental death *$100.00 weekly indemnity, accident and sickness*	**$32.00** *Quarterly*

ALSO HOSPITAL EXPENSE FOR MEMBERS WIVES AND CHILDREN

86c out of each $1.00 gross income used for members' benefits

$3,000,000.00 INVESTED ASSETS — **$14,000,000.00 PAID FOR CLAIMS**

$200,000.00 deposited with State of Nebraska for protection of our members.

Disability need not be incurred in line of duty—benefits from the beginning day of disability

PHYSICIANS CASUALTY ASSOCIATION
PHYSICIANS HEALTH ASSOCIATION
45 years under the the same management
400 FIRST NATIONAL BANK BUILDING • OMAHA 2, NEBRASKA

In Lansing

HOTEL OLDS

Fireproof

400 ROOMS

FOR SALE—NEW SWD-52 BURDICK Short Wave Diathermy machine, never used. Replacement price is $385.00 plus sales tax. Will sacrifice for $350.00 and deliver to your office if in the Lower Peninsula of Michigan. Write or phone R. E. Spinks, M.D., Cadillac, Michigan.

WHEN *Sensitive Skin* IS DUE TO COSMETICS

Symptoms are often allayed when offending allergens are removed. Prescribe AR-EX Cosmetics —free from known irritants.

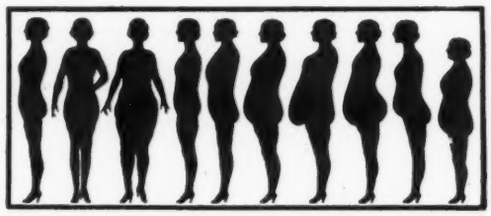
℞ AR-EX COSMETICS

FREE FORMULARY

DR.....
ADDRESS.....
CITY.....
STATE.....

AR-EX COSMETICS, INC. 1036 W. VAN BUREN ST. CHICAGO 7, ILL.

Supports for All Types
KELLOGG CORSET SHOP
1108 EATON TOWER — DETROIT 26
CADILLAC 1450
PERSONAL SUPERVISION: BARBARA LYMBURNER



Little Joe Genius says—

I see where Doctor Butler (a highbrow from Boston) says that general practice is obsolete, yet goes all out for a national compulsory health bill for medical care whose foundation is based on the average care given by these obsolete gentlemen. Ain't people funny?

COMMUNICATIONS

(Continued from Page 1664)

ment of Health that there was a news item concerning my wife and myself.

As I recall, the item stated simply that my wife, Dr. Gladys J. Kleinschmidt, had joined me in Chicago, and that I was affiliated with the Tuberculosis Institute of Chicago and Cook County. It just so happens that that is one of my affiliations. I am also affiliated with the University of Illinois, School of Medicine, as Associate Professor of Public Health and Preventive Medicine. In addition, I am a member of the Board of Directors of the Municipal Tuberculosis Sanatorium.

I thought this information would be of interest to you and would appreciate were a correction entered in the next issue of THE JOURNAL.

Sincerely yours,

EARL E. KLEINSCHMIDT, M.D., Dr. P.H.,
Director, Tuberculosis Institute, Chicago, Illinois.

* * *

Dear Dr. Haughey:

The State Department of Social Welfare takes pleasure in announcing the appointment of Willard R. Klunzinger, M.D., of Lansing, as State Supervising Ophthalmologist. Dr. Klunzinger will act as consultant, part time, to the Aid to the Blind and Division of Services for the Blind programs. Dr. Klunzinger succeeds Dr. John O. Wetzel who served in this capacity for a period of ten years.

We believe the members of your profession will be interested in this announcement.

Very truly yours,

F. F. FAURI
Director, State Department of Social Welfare

Meyer Institute of Body Culture
Massage and Swedish Movements—Medical Gymnastics
Separate Departments for Ladies and Gentlemen
TRinity 2-2243-4
330 New Center Building, Detroit 2, Michigan

Say you saw it in the Journal of the Michigan State Medical Society

THE MARY E. POGUE SCHOOL

For Retarded Children and Epileptic Children

Children are grouped according to type and have their own separate departments. Separate buildings for girls and boys.

Large beautiful grounds. Five school rooms. Teachers are all college trained and have Teachers' Certificates.

Occupational Therapy. Speech Corrective Work.

The School is only 26 miles west of Chicago. All west highways out of Chicago pass through or near Wheaton.

Referring physicians may continue to supervise care and treatment of children placed in the School. You are invited to visit the School or send for catalogue.

25 Geneva Road **Wheaton, Ill.** **Phone: Wheaton 319**

Clinical Laboratories

W. G. Gamble, Jr., M.D., Pathologist

2010 Fifth Avenue **Bay City, Michigan**

Telephones—6381—8511—6516

Complete Medical Laboratory Diagnosis Including

Allergy
Animal Innoculation
Bacteriology
Basal Metabolism
Bio-Chemistry
Electrocardiography
Hematology
Serology
Tissue Diagnosis

Blood and Plasma Bank and Special Solutions for Intravenous Therapy

NOTE: Information, containers, tubes, etc., on request.

YOUR PATIENTS FITTED WITH
INVISIBLE CONTACT LENSES
BY EXPERIENCED TECHNICIANS
Write for Information

Modern Invisible Lens Service Inc

1008 Schofield Bldg., Cleveland 15, Ohio
1252 David Whitney Bldg., Detroit, Mich.
526 State Tower Bldg., Syracuse 2, N. Y.
427 Medical Centre, Buffalo 9, N. Y.
1006 Medical Arts Bldg., Scranton, Pa.
R. D. 3, Stroudsburg, Pa.
616 G. Daniel Baldwin Bldg., Erie, Pa.

AN ADDED Service to the Medical Profession

Urine Analysis
Blood Chemistry
Hematology
Special Tests
Basal Metabolism
Serology
Parasitology
Mycology
Phenol Coefficients
Bacteriology
Poisons
Court Testimony

Send for Fee List

SIX HOUR PREGNANCY TEST

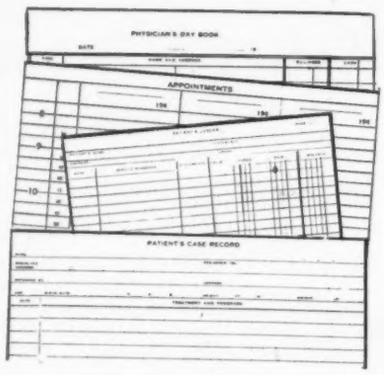
THE SAME dependable service you have always found at Central Laboratories is now available on a *six hour pregnancy test*—the GONESTRONE Test.

The latest and most reliable of the tests for determining pregnancy, the GONESTRONE is a modification of the Aschheim-Zondek and Friedman Tests, and was originated by Drs. Salmon, Geist, Frank and Salmon. In approximately 1,000 comparative tests made during the past year in our research department, we have found the GONESTRONE to be almost 100 per cent accurate.

In this, as in other clinical tests and chemical analyses made in our laboratories, your work will be handled with thoroughness and exactitude. . . . Your patients will find pleasant, well-equipped examining rooms. . . . You will approve our fees.

Directors: Joseph A. Wolf
Dorothy E. Wolf . . .

Central Laboratories
Clinical and Chemical Research
312 David Whitney Building
Detroit 26, Michigan • • • •
Telephones: Cherry 1030. (Res.) Evergreen 1220



GOOD OFFICE RECORDS MAKE MONEY

It is a fact that physicians with the best office records have the best collections. And, you don't need a Philadelphia lawyer to work out a system for you. The answer is: **PM** record forms—tailor-made for the physician's office. Simple, adequate, time-saving—the result of 14 years research in managing professional office routine. Samples on request.

PM • PROFESSIONAL • MANAGEMENT

A COMPLETE BUSINESS SERVICE FOR THE MEDICAL PROFESSION

Reg. U. S. Pat. Off.

Security Bank Building • • Battle Creek, Michigan

INDEX TO ADVERTISERS

Index to Volume 45

AUTHOR'S INDEX

CONTRIBUTED PAPERS

A

B

C

DEPARTMENT INDEX

Communications

The Doctor's Hobby

The Doctor's Library

Editorial Comment

Editorials

In Memoriam

It's The Law, Doctor

Medical Veterans' Readjustment

Michigan's Department of Health

Michigan Medical Service

Michigan State Medical Society

Miscellaneous

Political Medicine

President's Page

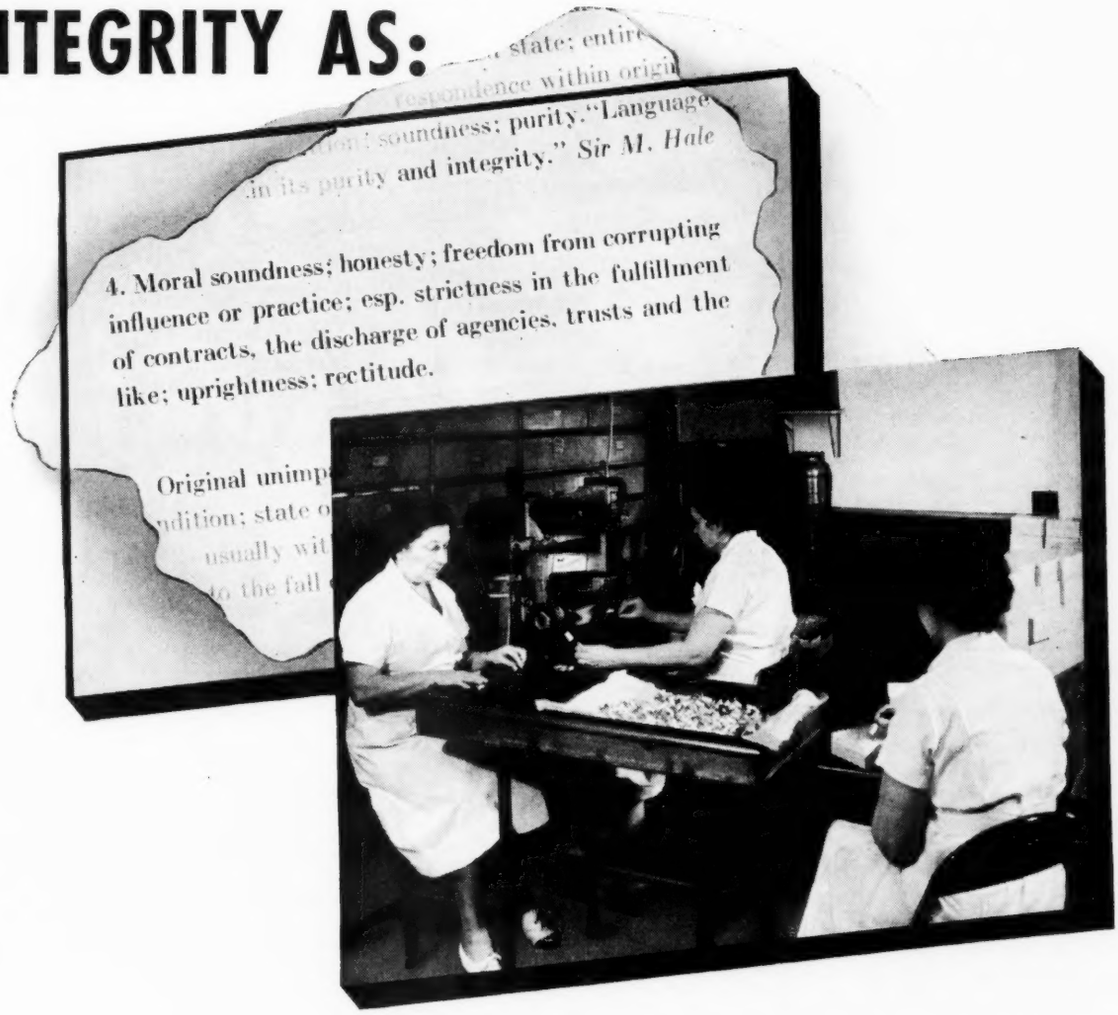
War Medicine

What's What

Woman's Auxiliary

You and Your Business

WEBSTER DEFINES INTEGRITY AS:



U. S. STANDARD PRODUCTS

- BIOLOGICALS
- PHARMACEUTICALS
- ALLERGENIC PRODUCTS
- HORMONES

Most physicians who use U. S. Standard Products routinely—and they are many—would agree as to the singular aptness of that definition applied to U. S. Standard biologicals and pharmaceuticals.

An increasing number of physicians are looking to U. S. Standard to supply them with medicaments formulated to meet unusual as well as routine needs—and to bring them the new advances of pharmacologic progress.

This specialized service to the medical profession stems from a somewhat unusual organization. Devoted to the principle: "Not how *much*, but how well," U. S. Standard Products Co. are especially well situated in location, staff, personnel and facilities.

U. S. STANDARD PRODUCTS CO.

WOODWORTH, WISCONSIN, U. S. A.

BACKGROUND

Three Decades of Clinical Experience

THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

These products are hypo-allergenic.

DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to coöperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

MILWAUKEE SANITARIUM Wauwatosa, Wis.

For NERVOUS DISORDERS

(Chicago Office—1117 Marshall Field Annex Wednesdays, 1-3 P. M.)

Maintaining highest standards

for more than half a century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M.D.
Carroll W. Osgood, M.D.
William T. Kradwell, M.D.
Benjamin A. Ruskin, M.D.
Lewis Danziger, M.D.
Russell C. Morrison, M.D.
E. Madison Paine, M.D.
H. Gladys Spear, M.D.
Arthur J. Patek, M.D.

G. H. Schroeder
Business Manager

COLONIAL HALL—
One of the 14 Units in "Cottage Plan."

the JOURNAL
of the MICHIGAN STATE MEDICAL SOCIETY

Volume 45 Number 8

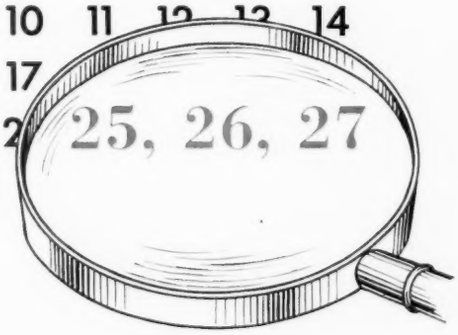
ANNUAL SESSION NUMBER

SEP 17 1946
LIBRARY

Red Letter Days

September, 1946

SUN	MON	TUE	WED	THU	FRI	SAT
1	2	3	4	5	6	7
8	9	10	11	12	13	14
15	16	17				
22	23	24	25, 26, 27			
29	30					

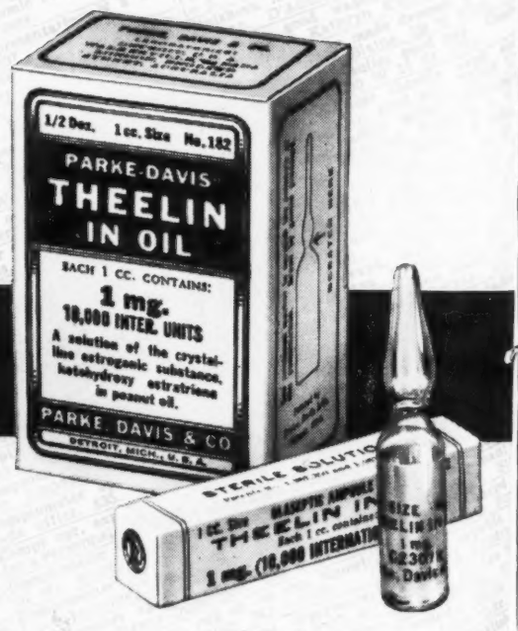


(See page 1075)

AUGUST, 1946

Table of Contents—Page 1001

YOUR HELP



PARKE, DAVIS & COMPANY
DETROIT 32 • MICHIGAN

For patient of intermediate or stocky type-of-build.

FOR AMBULATORY PATIENTS with INJURIES OR DISEASES of the LUMBAR SPINE

For patient of thin type-of-build.

CAMP lumbosacral supports are widely recommended by orthopedic surgeons and physicians.

An important factor in the good results reported from their use is that they extend downward over the sacroiliac and gluteal regions. The Camp adjustment provides exceptional restraint of movement.

In more severe lesions, aluminum uprights or the Camp spinal brace are easily incorporated.

Camp lumbosacral supports are moderately priced.

CAMP

ANATOMICAL SUPPORTS

S. H. CAMP & COMPANY · Jackson, Mich. · *World's Largest Manufacturers of Scientific Supports*

Offices in NEW YORK · CHICAGO · WINDSOR, ONTARIO · LONDON, ENGLAND

BACKGROUND

Three Decades of Clinical Experience

THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

These products are hypo-allergenic.

DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to coöperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

MILWAUKEE SANITARIUM Wauwatosa, Wis.

For NERVOUS DISORDERS

(Chicago Office—1117 Marshall Field Annex Wednesdays, 1-3 P. M.)

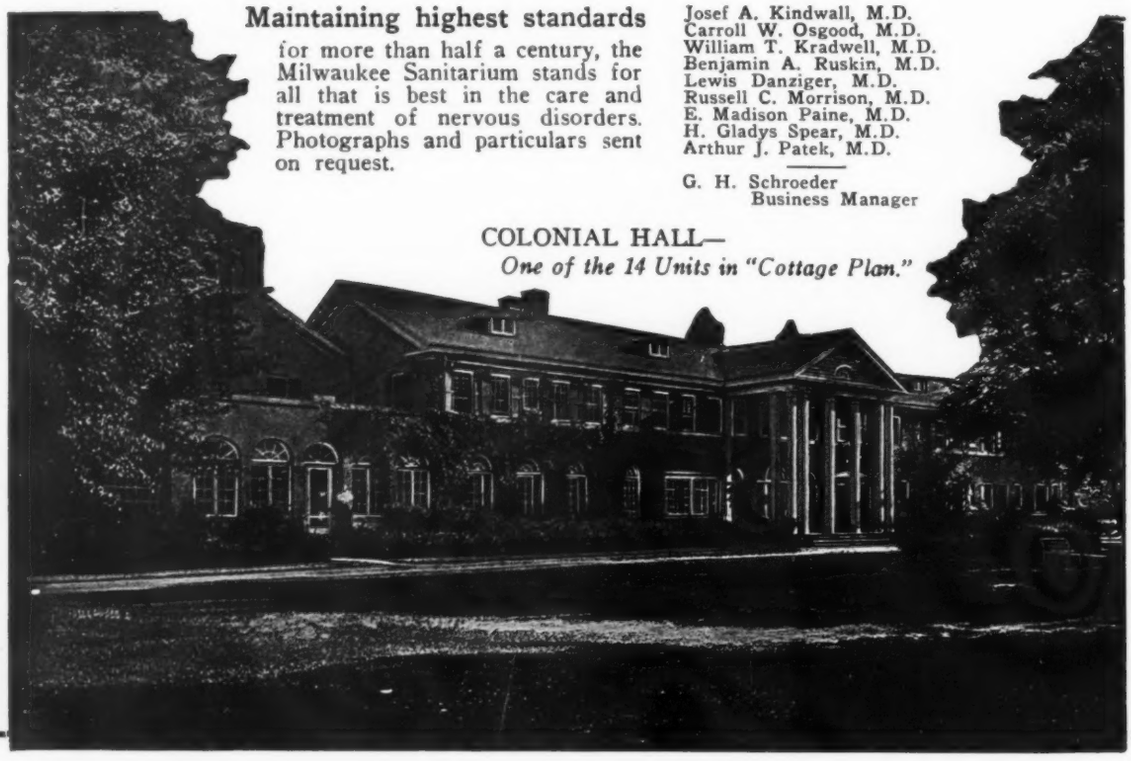
Maintaining highest standards

for more than half a century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M.D.
Carroll W. Osgood, M.D.
William T. Kradwell, M.D.
Benjamin A. Ruskin, M.D.
Lewis Danziger, M.D.
Russell C. Morrison, M.D.
E. Madison Paine, M.D.
H. Gladys Spear, M.D.
Arthur J. Patek, M.D.

G. H. Schroeder
Business Manager

COLONIAL HALL—
One of the 14 Units in "Cottage Plan."



the JOURNAL
of the MICHIGAN STATE MEDICAL SOCIETY

Volume 45 Number 9

JOHN CREARY
OCT 16 1946
LIBRARY

SEPTEMBER, 1946

Table of Contents—Page 1137

H. J. Pyle, M.D.
Grand Rapids
MSMS Speaker
1929-1933

"---Unto the Third and

PROTECTION

PROTECTION against congenital syphilis can often be accomplished by treatment of the expectant mother.

As easy as . . .

That's just about how quickly and easily you can get ready for an injection of Abbott's Romansky formula of penicillin calcium in oil and wax when you use a new sterile Disposable Cartridge Syringe. Here's why: No further sterilization of syringe and needle. No drying. No complications from traces of water. No trouble of drawing the fluid from a bulk container. No wasted suspension. And, last but not least, no need to bother about cleaning the needle and syringe afterwards. *Just throw them away*. Each set consists of a disposable plastic syringe with an affixed standard 20-gauge, 1½-inch stainless steel needle and a glass cartridge-plunger containing a 1-cc. dose of 300,000 units of penicillin suspended in peanut oil and beeswax. You will find the set complete, compact, easy to carry and ready to use. Demand sometimes outstrips supply, but we're making more sets every day. ABBOTT LABORATORIES, North Chicago, Illinois.

Abbott's

Penicillin in Oil and Wax

with the B-D* (ROMANSKY FORMULA)

Disposable Syringe and Cartridge Set

*T. M. REG. BECTON, DICKINSON & CO.

BACKGROUND

Three Decades of Clinical Experience

THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

These products are hypo-allergenic.

DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to coöperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

MILWAUKEE SANITARIUM Wauwatosa, Wis.

For NERVOUS DISORDERS

(Chicago Office—1117 Marshall Field Annex Wednesdays, 1-3 P. M.)

Maintaining highest standards

for more than half a century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

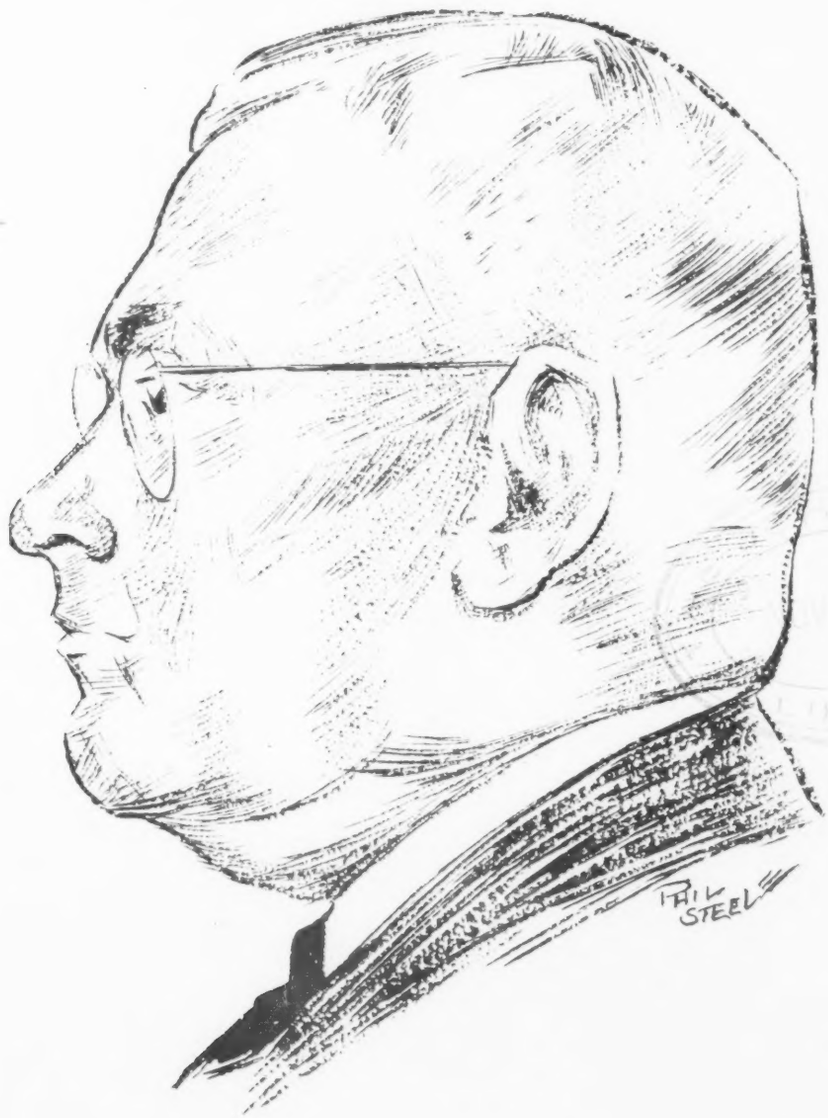
Josef A. Kindwall, M.D.
Carroll W. Osgood, M.D.
William T. Kradwell, M.D.
Benjamin A. Ruskin, M.D.
Lewis Danziger, M.D.
Russell C. Morrison, M.D.
E. Madison Paine, M.D.
H. Gladys Spear, M.D.
Arthur J. Patek, M.D.

G. H. Schroeder
Business Manager

COLONIAL HALL—
One of the 14 Units in "Cottage Plan."

the JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY

Volume 45 Number 10



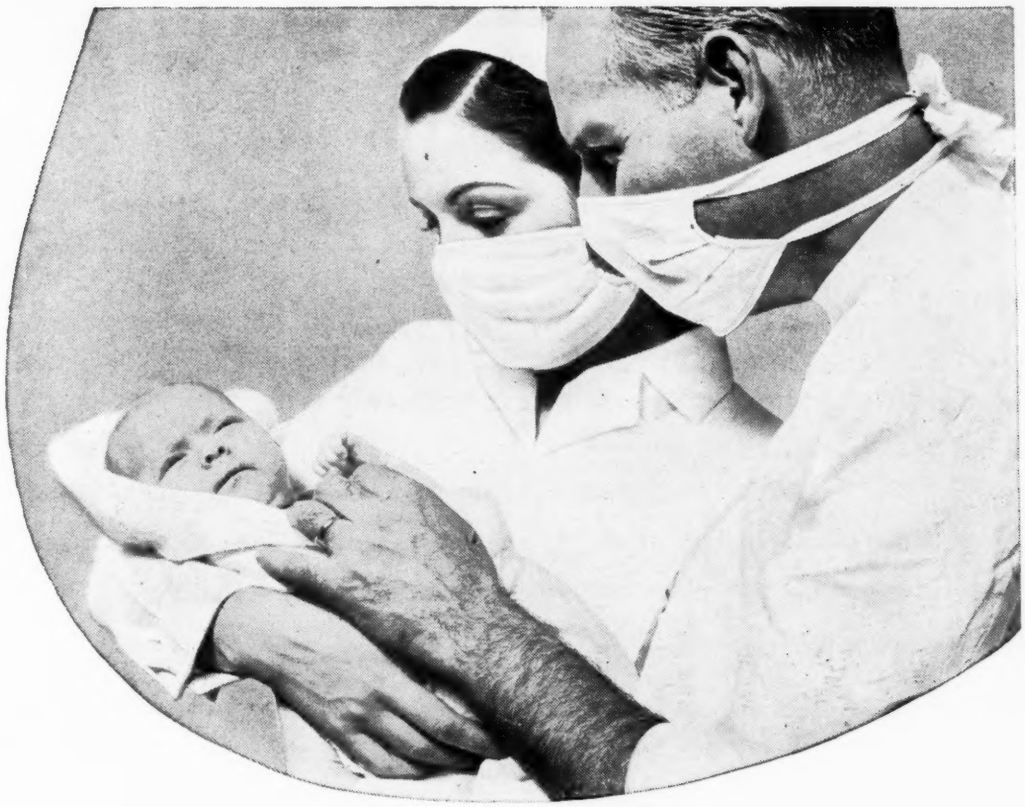
OCTOBER, 1946

Table of Contents—Page 1289

F. E. Reeder, M.D.
Flint
MSMS Speaker
1936-1937

SYMBOLS OF SIGNIFICANCE

MAPHARSEN



Still the fatal first month

Despite the gratifying dramatic decline in infant mortality, *there is still only slight reduction in the number of deaths of infants under one month.* During these critical 30 days, among the important precautions to be exercised is the right start on the right foods.

'Dexin' has proved an excellent "first carbohydrate". Because of its high dextrin content, it resists fermentation by the usual intestinal organisms, tends to hold gas formation, distention and diarrhea to a minimum, and promotes the formation of soft, flocculent curds facilitating digestion of milk proteins.

Easily prepared in hot or cold milk, 'Dexin' brand High Dextrin Carbohydrate is palatable but not too sweet. 'Dexin' *does* make a difference.

'Dexin' Reg. Trademark

'Dexin' HIGH DEXTRIN CARBOHYDRATE

BRAND

Composition—Dextrins 75% • Maltose 24% • Mineral Ash 0.25% • Moisture 0.75% • Available carbohydrate 99% • 115 calories per ounce • 6 level packed tablespoonfuls equal 1 ounce • Containers of twelve ounces and three pounds • Accepted by the Council on Foods and Nutrition, American Medical Association.

Literature on request

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 East 41st St., New York 17, N.Y.

BACKGROUND

Three Decades of Clinical Experience

THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

These products are hypo-allergenic.

DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to coöperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

MILWAUKEE SANITARIUM Wauwatosa, Wis.

For NERVOUS DISORDERS

(Chicago Office—1117 Marshall Field Annex Wednesdays, 1-3 P. M.)

Maintaining highest standards for more than half a century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M.D.
Carroll W. Osgood, M.D.
William T. Kradwell, M.D.
Benjamin A. Ruskin, M.D.
Lewis Danziger, M.D.
Russell C. Morrison, M.D.
E. Madison Paine, M.D.
H. Gladys Spear, M.D.
Arthur J. Patek, M.D.

G. H. Schroeder
Business Manager

COLONIAL HALL—
One of the 14 Units in "Cottage Plan."

the JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY

Volume 45 Number 11

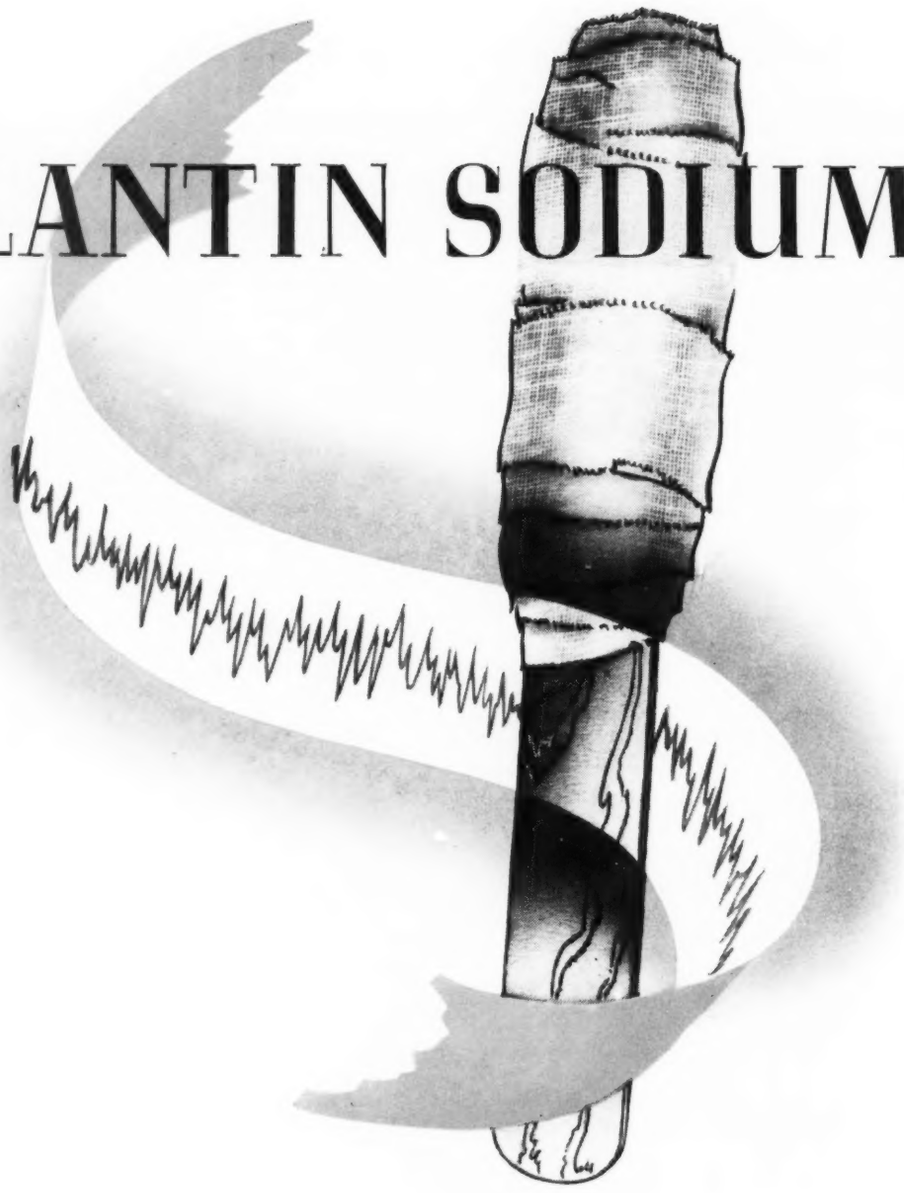
Philip A. Riley, M.D.
Jackson
MSMS Speaker
1938-1939

NOVEMBER, 1946

Table of Contents—Page 1409

SYMBOLS OF SIGNIFICANCE

DILANTIN SODIUM



Thanksgiving

Our fathers' God! from out whose hand
The centuries fall like grains of sand
We meet today, united, free,
And loyal to our land and Thee,
To thank Thee for the era done,
And trust Thee for the opening one.

Whittier

THE
MEDICAL PROTECTIVE COMPANY
FORT WAYNE, INDIANA

BACKGROUND

Three Decades of Clinical Experience

THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

These products are hypo-allergenic.

DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to coöperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

MILWAUKEE SANITARIUM Wauwatosa, Wis.

For NERVOUS DISORDERS

(Chicago Office—1117 Marshall Field Annex Wednesdays, 1-3 P. M.)

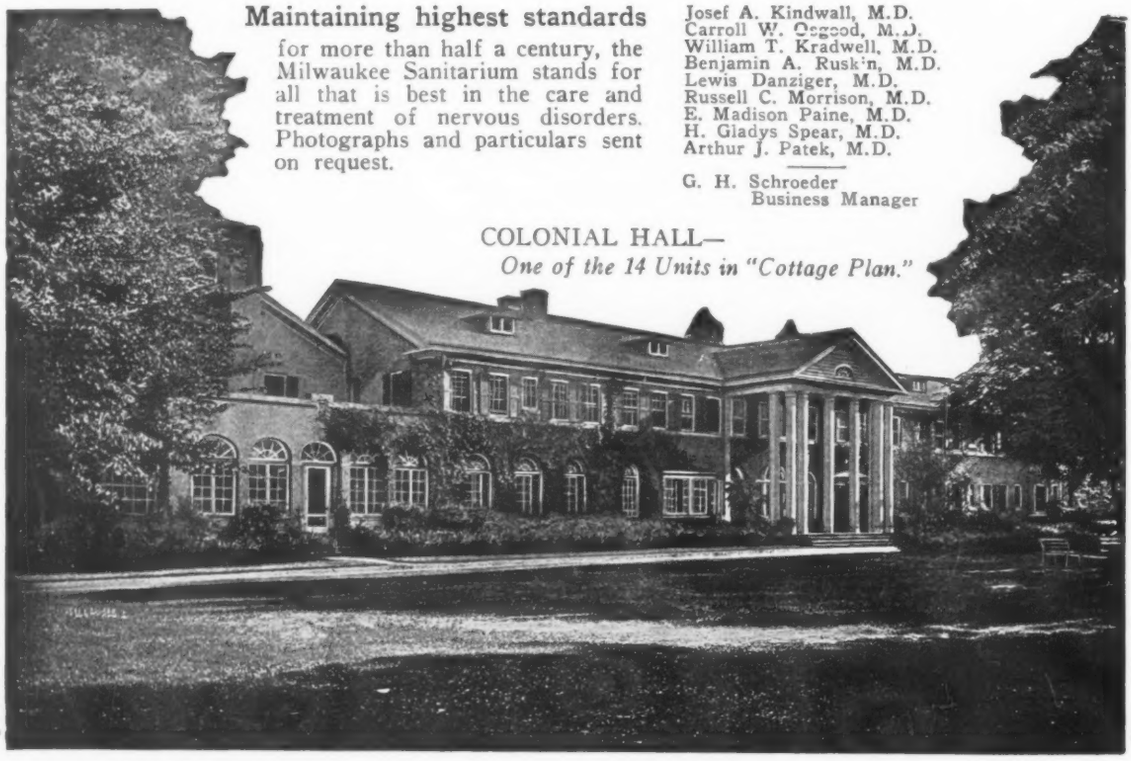
Maintaining highest standards

for more than half a century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M.D.
Carroll W. Osgood, M.D.
William T. Kradwell, M.D.
Benjamin A. Ruskin, M.D.
Lewis Danziger, M.D.
Russell C. Morrison, M.D.
E. Madison Paine, M.D.
H. Gladys Spear, M.D.
Arthur J. Patek, M.D.

G. H. Schroeder
Business Manager

COLONIAL HALL—
One of the 14 Units in "Cottage Plan."



the JOURNAL of the MICHIGAN STATE MEDICAL SOCIETY

Volume 45 Number 12

DECEMBER, 1946

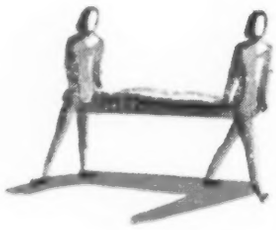
Table of Contents—Page 1553

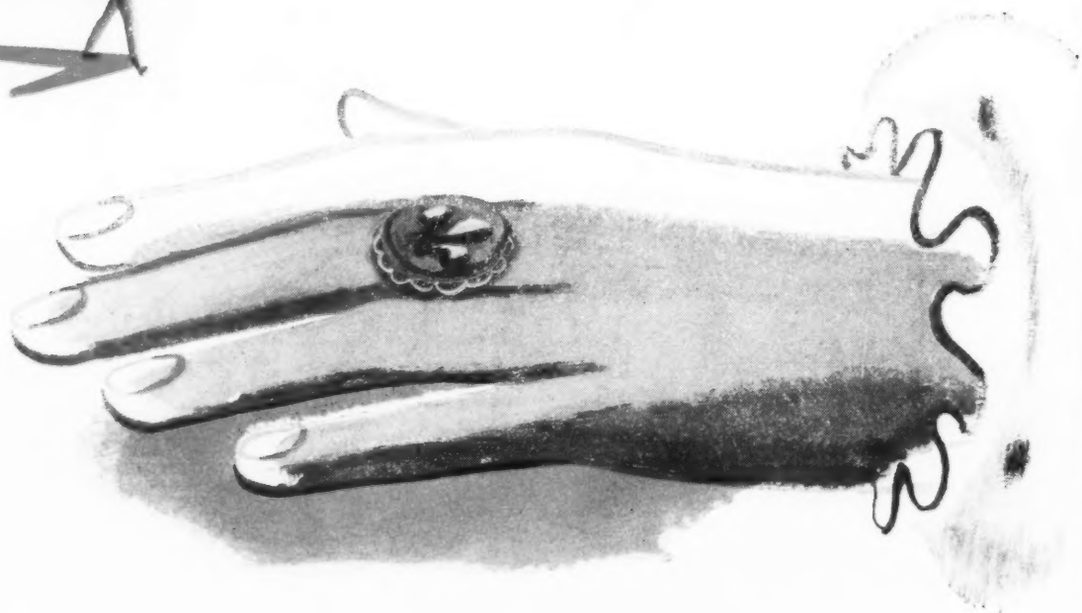
R. S. Morrish, M.D.
Flint
MSMS President
1945-1946

SYMBOLS OF SIGNIFICANCE

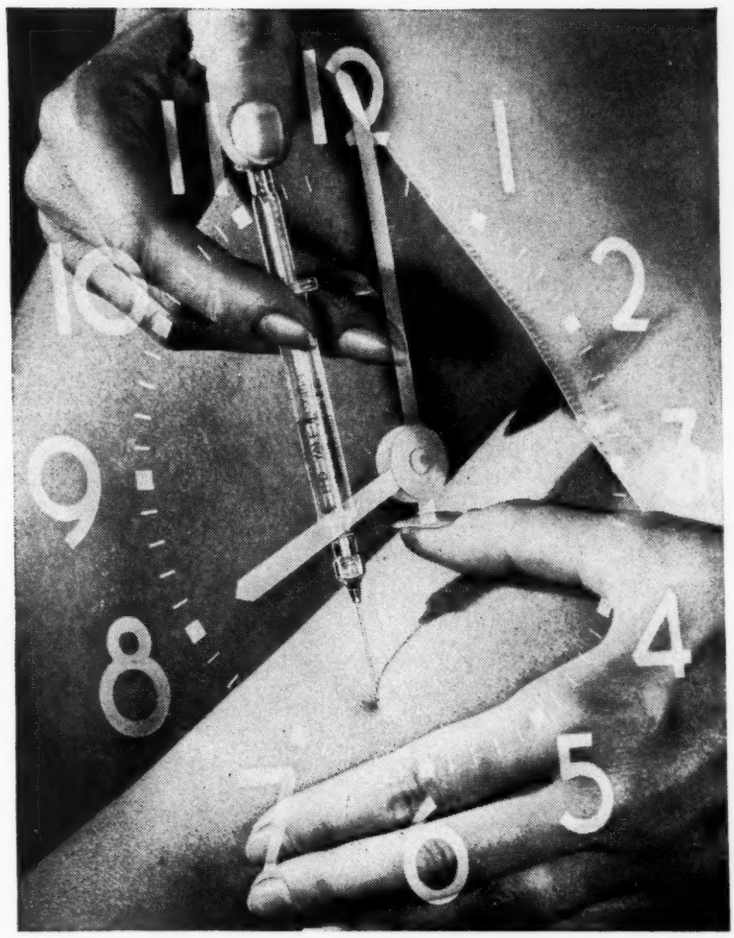
Tyrothricin

Parke-Davis





One-injection control of diabetes



THE LIFE OF MANY DIABETICS, complicated by the need for two, and sometimes three, daily injections of insulin, can be simplified by a change to 'Wellcome' Globin Insulin with Zinc—which, because of its intermediate action, may provide adequate control with *only one injection a day.* This welcomed change-over can be made in three clear-cut steps:

1. THE INITIAL CHANGE-OVER DOSAGE: On the first day, 30 minutes or more before breakfast, give a single dose of 'Wellcome' Globin Insulin with Zinc, equal to 2/3 of the total previous daily dose of regular insulin.

2. ADJUSTMENT TO 24 HOUR CONTROL: Gradually adjust the Globin Insulin dosage to provide 24-hour control as evidenced by a fasting blood sugar level of less than 150 mgm. or sugar-free urine in the fasting sample.

3. ADJUSTMENT OF DIET: Simultaneously adjust carbohydrate distribution of diet to balance insulin activity; initially 2/10, 4/10 and 4/10. Any midafternoon hypoglycemia may usually be offset by giving 10 to 20 grams of carbohydrate between 3 and 4 p.m. Base final carbohydrate adjustment on fractional urinalyses.

Most mild and many moderately severe cases may be controlled by *one daily injection of 'Wellcome' Globin Insulin with Zinc,* a clear solution comparable to regular insulin in its freedom from allergenic properties. Vials of 10 cc.; 40 and 80 units per cc. Developed in The Wellcome Research Laboratories, Tuckahoe, New York. U.S. Pat. 2,161,198. Literature on request.

'Wellcome' Trademark Registered

'WELLCOME' Globin Insulin WITH ZINC

BURROUGHS WELLCOME & CO. (U.S.A.) INC., 9 & 11 EAST 41ST STREET, NEW YORK 17, N.Y.

BACKGROUND

Three Decades of Clinical Experience

THE use of cow's milk, water and carbohydrate mixtures represents the one system of infant feeding that consistently, for three decades, has received universal pediatric recognition. No carbohydrate employed in this system of infant feeding enjoys so rich and enduring a background of authoritative clinical experience as Dextri-Maltose.

DEXTRI-MALTOSE No. 1 (with 2% sodium chloride), for normal babies.
DEXTRI-MALTOSE No. 2 (plain, salt free), permits salt modifications by the physician.
DEXTRI-MALTOSE No. 3 (with 3% potassium bicarbonate), for constipated babies.

These products are hypo-allergenic.

DEXTRI-MALTOSE

Please enclose professional card when requesting samples of Mead Johnson products to coöperate in preventing their reaching unauthorized persons. Mead Johnson & Company, Evansville, Ind., U. S. A.

MILWAUKEE SANITARIUM Wauwatosa, Wis.

For NERVOUS DISORDERS

(Chicago Office—1117 Marshall Field Annex Wednesdays, 1-3 P. M.)

Maintaining highest standards

for more than half a century, the Milwaukee Sanitarium stands for all that is best in the care and treatment of nervous disorders. Photographs and particulars sent on request.

Josef A. Kindwall, M.D.
Carroll W. Osgood, M.D.
William T. Kradwell, M.D.
Benjamin A. Ruskin, M.D.
Lewis Danziger, M.D.
Russell C. Morrison, M.D.
E. Madison Paine, M.D.
H. Gladys Spear, M.D.
Arthur J. Patek, M.D.

G. H. Schroeder
Business Manager

COLONIAL HALL—
One of the 14 Units in "Cottage Plan."